

BEFORE THE  
ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:  
CONCENTRATED ANIMAL FEEDING  
OPERATIONS (CAFOs): PROPOSED  
AMENDMENTS TO 35 ILLINOIS  
ADMINISTRATIVE CODE  
PARTS 501, 502 AND 504

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STATE OF ILLINOIS  
Pollution Control Board

Hearing held, pursuant to notice, on  
Tuesday, October 23, 2012, at the Brookens  
Administrative Center, Lyle Shields County Board  
Meeting Room, 1776 East Washington Street, Urbana,  
Illinois, before duly appointed Hearing Officer:

MR. TIM FOX

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7 MR. ANAND RAO

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14 IN BEHALF OF THE AGRICULTURAL COALITION:

15 MS. CLAIRE A. MANNING

16 MR. JIM KAITSCHUK

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18 IN BEHALF OF THE ENVIRONMENTAL GROUPS:

19 MS. JESSICA A. DEXTER

20 MS. KIM KNOWLES

21 MS. DANIELLE J. DIAMOND

22

23

24

1 10:02 a.m.

2 HEARING OFFICER: Good morning, everyone,  
3 and welcome to this Illinois Pollution Control Board  
4 Hearing. My name is Tim Fox and I am the Hearing  
5 Officer for this rule-making proceeding entitled In  
6 the Matter of Concentrated Animal Feeding  
7 Operations, or CAFOs, Proposed Amendments to 35  
8 Illinois Administrative Code 501, 502 and 504. The  
9 board docket number for this rule-making is R12-23.

10 As our very first order of business this  
11 morning, we do have present with us Senator Mike  
12 Frerichs, who would like to offer a comment on the  
13 Agency's proposal. And, Senator Frerichs, please go  
14 ahead.

15 SENATOR FRERICHS: Thank you very much.  
16 Thanks for being here. I decided to come out today  
17 because this was a bill that I carried in the Senate  
18 this year.

19 I want to give the Board a little bit of  
20 background and thoughts on the legislative process.  
21 As a result of longtime negotiations between the  
22 Environmental Groups and Agricultural Groups -- and  
23 I think the first approach on this maybe a year and  
24 a half ago, there was -- the first year, they tried

1 to get it through and then this year we finally  
2 reached some sort of agreement.

3 I just want to talk about the importance  
4 of the environment and agriculture in my district.  
5 In my district, I represent a large rural area where  
6 farming is very important; farmers of all kinds work  
7 hard to provide safe food while implementing sound  
8 environmental practices on our farms.

9 Agriculture production plays a leading  
10 role in Illinois's economy. Livestock production is  
11 an important part of this ag sector, directly  
12 creating \$3.5 billion in economic activity in  
13 Illinois. We want to make sure we continue to  
14 maintain that while maintaining safe drinking water.

15 The combined economic value of livestock  
16 processing and production-related activities in the  
17 state is over \$27 billion, so reasonable and  
18 technically feasible regulations will provide  
19 necessary environmental protections while  
20 maintaining a strong agricultural sector in our  
21 economy and that's what I think we've finally  
22 reached in our legislation.

23 Consistency with the Livestock Management  
24 Facilities Act is also a very important factor for

1 the proposed rule. The LMFA is a law prescribed at  
2 General Assembly through three different revisions  
3 of the Act that govern construction and pollution  
4 prevention standards for livestock farms in  
5 Illinois.

6 Providing clarity in the rule and  
7 consistency with the LMFA will allow farmers to  
8 properly adhere to regulations and hopefully will  
9 improve environmental performance in our state.

10 The senior management, I just want to say,  
11 of IEPA worked with the stakeholders on both sides  
12 of this issue with the proposed CAFO rule changes.  
13 They should be commended for their efforts. This  
14 work should lead to a commonsense approach for  
15 permit requirements and regulations for all  
16 involved. There is too much at stake for our  
17 environment and for our industry.

18 And I want to thank you very much for  
19 coming over here to Urbana today to hear from  
20 people. I know we have a lot of stakeholders  
21 gathered today. And I look forward to implementing  
22 these rules. So, thank you very much.

23 HEARING OFFICER: Senator, thank you for  
24 your comment, which is appreciated, and we hope you

1 will feel free to stay as your schedule allows.

2 SENATOR FRERICHS: It may not allow me to  
3 stay much longer, but I am sure that you will have  
4 time for, looking around the room, plenty of  
5 discussion today.

6 HEARING OFFICER: Thank you very much,  
7 Senator.

8 SENATOR FRERICHS: Thank you.

9 HEARING OFFICER: Proceeding on, I do want  
10 to note, first of all, that present today also from  
11 the Board are the Board's Chairman, Tom Holbrook,  
12 who is at my immediate left. He is the lead board  
13 member in this proceeding. Further to my left are  
14 Board Members Jennifer Burke and Dr. Deanna Glosser.  
15 And at my immediate right is Anand Rao of the  
16 Board's Technical Unit.

17 By way of quick background, the Illinois  
18 Environmental Protection Agency filed this  
19 rule-making proposal on March 1st, 2012 and, in an  
20 order dated March 15th, 2012, the Board accepted  
21 that proposal for hearing.

22 The first hearing took place on  
23 August 21st, 2012 in Springfield and the second in  
24 Belleville last week, on October 16th, 2012. A

1 hearing officer order set October 9th, 2012 as the  
2 deadline to pre-file testimony for this hearing.  
3 And the Board has received pre-filed testimony for  
4 this hearing from Dr. Ted Funk, who is present today  
5 and has made clear his willingness to respond to  
6 questions on the basis of that testimony.

7 I do want to note for the record that  
8 there is a sheet inside the door behind the head  
9 table at which anyone who did not pre-file testimony  
10 may indicate that they would like to testify today.  
11 For the record, that sheet remains blank, so we do  
12 not expect to have anyone falling into that category  
13 or description.

14 The Board has received other filings and I  
15 want to address those quickly. First, on  
16 September 25th, 2012, the Agricultural Coalition  
17 filed a motion proposing amendments to the Agency's  
18 original rule-making proposal. Because that motion  
19 is directed to the full Board and requests action at  
20 a later point before the Board proceeds to first  
21 notice, there will be no decision today on that  
22 motion.

23 Second, on October 9th, 2012, the  
24 Environmental Groups filed a motion requesting that

1 the Hearing Officer extend the time to respond to  
2 the Agricultural Coalition's motion proposing  
3 amendments.

4 The 14 days to respond to the  
5 Environmental Groups' motion passes today and I want  
6 to see if any of the participants want to make a  
7 position on the motion or response to the motion on  
8 the record today.

9 (There was no response.)

10 HEARING OFFICER: Neither seeing nor  
11 hearing any, I will grant the motion for an  
12 extension of time with perhaps a slight modification  
13 of the specific request.

14 It was couched in terms of filing after  
15 the conclusion of the record. I will interpret that  
16 as meaning with final comments at the conclusion of  
17 the record, and since we cannot set today a date  
18 that hinges on the availability of a transcript that  
19 is not even in existence yet, there will be a  
20 subsequent board order at the time we receive that  
21 final transcript that clarifies the precise date on  
22 which that response would become due with the final  
23 post-hearing comments. I do not expect to set  
24 separate dates for those two filings. And I will



1 again clarify that in a written hearing officer  
2 order in the future.

3 Third, I want to note that on  
4 October 16th, 2012, the deadline to pre-file  
5 testimony for the next hearing on Tuesday, the 30th,  
6 in De Kalb arrived and the Board received pre-filed  
7 testimony on the part of three witnesses from the  
8 Environmental Groups.

9 I simply want to note that that testimony  
10 and the accompanying attachments/exhibits are in the  
11 Board's record, are linked to the Clerk's office  
12 online and can be read, downloaded and copied in  
13 their entirety at this point in preparation for the  
14 hearing next week in De Kalb.

15 Fourth, and finally, I do want to note  
16 that the Board received word yesterday that the  
17 transcript of the hearing in Belleville should be  
18 available to us today and the Clerk's office assured  
19 me that they have every expectation that it would be  
20 placed in the Clerk's office online no later than  
21 this afternoon. And I see at least a general  
22 indication from the Agency that it is already there  
23 and they seem to be affirming that that is the case.

24 So, like the pre-filed testimony for next

1 week, the transcript of the Belleville hearing is  
2 now available for you to download and print and  
3 review. And that exhausts the filings that the  
4 Board has received at this point that I wanted to  
5 address today.

6 In speaking off the record with the chief  
7 participants, we arrived at an order of hearing for  
8 this hearing. First of all, we did, of course, hear  
9 the comment of Senator Frerichs.

10 Second, we will turn to Dr. Funk, who  
11 pre-filed testimony specifically for this hearing.  
12 Dr. Funk, if you would like to begin with a brief  
13 summary or statement in a moment, we can have you do  
14 that and then we'll proceed to the questions based  
15 upon the testimony that you had filed.

16 I again noted that no one who had not  
17 pre-filed indicated that they wished to testify.  
18 So, at the conclusion of Dr. Funk's testimony and  
19 the questions based upon it, we will turn to the  
20 Agricultural Coalition, who had -- we appreciate the  
21 Coalition's willingness to make available witnesses  
22 who can respond to questions raised by the Board on  
23 the record specifically regarding their earlier  
24 motion to amend the Agency's original proposal.

1           After addressing those questions, we can  
2           have any person who wishes to do so offer a public  
3           comment on the proposal. There is a sheet at the  
4           front of the room on which anyone who wishes to  
5           offer a brief comment may indicate their willingness  
6           and interest in doing so.

7           My expectation would be that people would  
8           offer comments of three to four minutes in length  
9           and we would go through those in the order in which  
10          people had signed up. I encourage you to sign up so  
11          that we make sure to include you. We'll take that  
12          up at the end of the testimony and questions.

13          Very generally, I want to add that the  
14          proceeding today is governed by the Board's  
15          procedural rules. Under Section 104.426 of those  
16          rules, all information that is relevant and is not  
17          repetitive or privileged will be admitted into the  
18          record.

19          Please bear in mind that questions today  
20          proposed by the board members or board staff are  
21          intended only to assist in developing a clear and  
22          complete record and do not reflect any decision on  
23          the merits of the proposal.

24          And for the benefit, finally, of our court

1 reporter, please avoid speaking at the same time as  
2 another person so our transcript will be as clear  
3 and organized as possible.

4 On procedures, are there any questions  
5 before we turn to Dr. Funk?

6 (There was no response.)

7 HEARING OFFICER: Neither seeing nor  
8 hearing any, Dr. Funk, thank you for waiting. I  
9 think it would be helpful if you step up to the  
10 podium where you will perhaps be a little more  
11 audible to everyone in the room.

12 MR. FUNK: I've been told I have a soft  
13 voice, so I'll see if I can -- I'm not sure if it's  
14 on. Is this -- does this have any effect  
15 whatsoever?

16 THE AUDIENCE: No.

17 MR. FUNK: Maybe an engineer should see if  
18 they can figure out how to turn it on. Oh, wait a  
19 minute. Power button. Better?

20 HEARING OFFICER: Dr. Funk, before we  
21 begin, we'll have the court reporter swear you in  
22 before your testimony gets underway.

23 (At this point in the proceedings, the  
24 Court Reporter administered the oath.)

1 HEARING OFFICER: Thank you, Dr. Funk.  
2 Please give a summary or statement. Go ahead.

3 MR. FUNK: Thanks for the opportunity to  
4 come and testify today. This is an issue that's  
5 important to me because I've been involved, of  
6 course, with the livestock industry and, more  
7 importantly, with nutrient management planning for  
8 most of my career. I've had a 32-year career with  
9 the University of Illinois Extension, and then  
10 working with livestock production across the state  
11 during that time.

12 I also share the concerns of citizens  
13 around the state in regard to water quality and air  
14 quality and management of soil, so I would like to  
15 think that I represent the interests of all citizens  
16 and not just the livestock industry and not just the  
17 citizens who are neighbors of livestock production.

18 Livestock production is an important part  
19 of our Illinois economy and we've made, I think,  
20 great strides over the last 20, 30 years to improve  
21 the nutrient management of livestock manure in the  
22 state and I think that we can continue to do that  
23 with appropriate regulatory language.

24 I want to recognize the efforts of the

1 Agency to continue in promulgating commonsense  
2 rules, rules that hopefully achieve clarity while  
3 also maintaining the needs and goals of  
4 environmental protection.

5 A summary of some of the points that I  
6 have introduced into the record through testimony  
7 include such things as making sure that the  
8 references for livestock waste volumes are current.

9 We recognize that some of the standards  
10 for livestock waste volume computations have changed  
11 over the years because there are changes in the  
12 industry. There are changes in the efficiency of  
13 nutrient utilization, efficiency of animals that are  
14 on feed, and so some of the -- some of the amounts  
15 of waste volumes and concentrations actually change  
16 over the years and those are -- it makes sense that  
17 the standards that are referenced in the rules have  
18 also changed to recognize that.

19 But it's a rather minor point in that  
20 these standards that are referenced are used for  
21 planning purposes and that the nutrient management  
22 plans are always built around the assumption that  
23 once facilities are in place, then the actual  
24 nutrient -- actual waste volumes and actual nutrient

1 concentrations that are accumulated from sampling,  
2 actual sampling of the site, are going to be used to  
3 continue with this planning.

4           The next point about winter spreading,  
5 again I concur with the Agency's emphasis on the  
6 maintenance and storage capacity. I think that's  
7 extremely important to help livestock producers  
8 maintain enough storage capacity to get them through  
9 the winter months without having to use winter  
10 spreading.

11           However, I do think that some of the  
12 language that's been suggested is overly  
13 prescriptive perhaps on the surface application on  
14 some of the injection systems, and I think the  
15 equivalent of that is going to be more burdensome  
16 and confusing than is necessary. And I would  
17 elaborate on that later if you have questions.

18           And then most importantly is again to  
19 avoid duplication in the manure nutrient management  
20 plans. We have -- since the time of the LMFA, the  
21 large facilities, that is those that have over 1,000  
22 animal units as defined in the LMFA, have been  
23 required by state regulation to develop manure  
24 nutrient management plans and put those into place

1 and so it would be very helpful to avoid duplication  
2 of that in the new rule that's being proposed today.

3           It's been very difficult for livestock  
4 producers to manage all the -- to prescribe all the  
5 details of these plans as it is. I remember in  
6 1995, we had an interagency meeting with the  
7 producers here on the Champaign-Urbana campus, a  
8 regular meeting that we had every two years, and we  
9 had a panel of NRCS. The federal NRCS Chief, Toby  
10 Ashford, was in on the panel and he was talking  
11 about the NRCS manure management planning and we had  
12 somebody from the federal EPA talking about their  
13 manure management plan and then the Illinois  
14 Department of Agriculture was talking about their  
15 winter management plan process and one of the  
16 producers finally got up in his aspiration and he  
17 said, "Would you please -- would the three of you  
18 please get together. I want one plan that I can  
19 have. I don't want three plans. I want one plan."

20           And we have made a substantial effort in  
21 Extension since then to bring the parties together  
22 and to try to come up with one type of plan that  
23 will help producers to clarify and to make sure that  
24 those plans are actually implemented and make sense



1 using inputs both from the industry, from the  
2 agencies, but also from the university data and  
3 research that both allows producers to operate but  
4 also maintain water quality and protect the  
5 environment.

6           There are many facilities in the state who  
7 have been helped by what we call technical service  
8 providers writing comprehensive nutrient management  
9 plans under the NRCS, CNMP 102. And those are even  
10 more vigorous -- more rigorous, sorry -- in that  
11 they address the nutrient transport potential from  
12 land application areas.

13           So, again, I would urge that we recognize  
14 and not duplicate the efforts of the CNMP process,  
15 writing process, because I feel that that takes into  
16 account virtually all of the intent of this rule,  
17 but those plans are in place in many instances  
18 around the state.

19           And so in summary, again, I would urge  
20 that the Agency balance the need for prescriptive  
21 language, to the extent that it's required by the  
22 federal regulation, with the Agency's desire for  
23 rule clarity and consistency. And that concludes my  
24 summary.

1 HEARING OFFICER: Very good, Dr. Funk.  
2 Thank you. We will turn to questions in a minute.  
3 If I may make a brief request, I think you are a  
4 little more audible when the microphone is closer to  
5 your face. And if you can pull that forward, we  
6 would appreciate it.

7 DR. FUNK: Okay.

8 HEARING OFFICER: Thanks very much.  
9 Dr. Funk has indicated that he has concluded his  
10 summary of his testimony and is willing to turn to  
11 questions. Is there anyone who wishes to pose a  
12 question to Dr. Funk on the basis of that testimony?

13 MS. DEXTER: I have some questions.

14 HEARING OFFICER: Is there a particular  
15 order that --

16 MS. MANNING: I'll go first. I just have  
17 one question.

18 HEARING OFFICER: Very good. Ms. Manning,  
19 please go ahead.

20 EXAMINATION

21 BY MS. MANNING:

22 Q. Good morning, Dr. Funk. The question that  
23 we had -- you indicated in terms of the frozen  
24 ground application that you believed that there

1 might be some overly prescriptive language, but I  
2 didn't hear in your testimony that you spoke to what  
3 that language might be that you believed to be  
4 overly prescriptive.

5           One of the things the Agricultural  
6 Coalition made a point of in its filing is that the  
7 current definition proposed related to application  
8 on frozen ground at 501.252 indicates that soil that  
9 is frozen anywhere between the first one-half inch  
10 to eight inches of soil, as measured from the ground  
11 surface, if that's the standard, one-half inch to  
12 eight inches, that there could be no application.

13           The producers are concerned about that and  
14 believe that to be overly prescriptive. It's a rule  
15 that the Agency, in its testimony, indicated came  
16 from the Wisconsin regulatory scheme. And during  
17 the stakeholder conferences as well as in this  
18 process, the Agriculture Coalition has suggested  
19 that a more liberal interpretation, one used in  
20 Iowa, be a better approach on this particular point.

21           I'm agreeing with you, of course, that  
22 nobody really wants to apply to frozen ground or  
23 apply in winter conditions; everybody wants to have  
24 the adequate storage, but obviously sometimes that's

1 not possible.

2           So, the Agricultural Coalition proposed a  
3 change in that particular provision that would  
4 indicate -- that came from more of the Iowa model --  
5 and indicates that soil that is impenetrable due to  
6 frozen soil moisture, but does not include soil that  
7 is only frozen to a depth of two inches or less.

8           And I would just like you to comment on  
9 those two different scenarios, either the Iowa  
10 approach or the Wisconsin approach, and that  
11 particular language just to inform the Board as to  
12 your opinion on that. Thank you.

13           A. Okay. And I spoke to one of our custom  
14 applicators from the state yesterday about this very  
15 thing to again confirm what I believe to be the case  
16 and he -- he agreed with this, and that is that a  
17 half inch of frost on the ground is so easy to  
18 penetrate; it really should not restrict -- that  
19 should not be a restriction in the amount of frost  
20 depth that would keep an injection system from  
21 applying manure. Two inches, then we're getting to  
22 the point where it would be difficult to penetrate  
23 with our normal injection equipment.

24           The other thing that I guess that bothers

1 me a little bit about being too prescriptive is if  
2 you look at an entire field, it's going to be very  
3 hard to determine an average. There are going to  
4 be -- typically there might be areas where there's  
5 no frost and others where there would be, you know,  
6 that two inches of frost.

7 So, to ask a producer to make that quick  
8 decision on that kind of detail across a field is  
9 going to be -- it's going to be a bit confusing and  
10 if it causes some consternation as to whether or not  
11 to inject, I think the deeper frost depth would  
12 certainly be more in order than the half inch that's  
13 being proposed here.

14 Q. Right. And just as a point of  
15 clarification, the rule as I understand as it reads  
16 now, injection is not -- this is for land  
17 application without injection.

18 A. For surface -- for surface application?

19 Q. Correct.

20 A. Okay. And once again, for half inch,  
21 that's going to be -- that can change very quickly  
22 over the course of the day and it can also be very  
23 difficult to find an average across the field of a  
24 half inch. Like I say, there's going to be some

1 areas where it's much less than half, so where do  
2 you make that decision?

3 MS. MANNING: Okay. Thank you. That's  
4 all I have right now. I might have follow-up after  
5 the other questions.

6 HEARING OFFICER: We will bear that in  
7 mind.

8 MS. DEXTER: May I ask a follow-up on this  
9 particular question?

10 HEARING OFFICER: Ms. Dexter, please do.

11 EXAMINATION

12 BY MS. DEXTER:

13 Q. Actually, maybe you just covered this and  
14 I didn't catch it, but in terms of surface  
15 application, the half inch --

16 THE REPORTER: Can you speak up just a  
17 little bit? Do you have a microphone?

18 HEARING OFFICER: Ms. Dexter, your  
19 microphone should be live. That might be very  
20 helpful.

21 BY MS. DEXTER:

22 Q. So, in terms -- you mentioned in your  
23 first response that injection in the half-inch  
24 circumstance is possible because it's not that

1 difficult to penetrate. Does it change things if  
2 you're just surface applying? Is that the question  
3 you --

4 A. Well, and that was a simpler question.  
5 Surface applying on frozen ground, we recognize that  
6 if ground is frozen, it's less -- there's going to  
7 be probably less infiltration of liquid being  
8 applied.

9 And part of my concern with prescribing  
10 that half-inch frozen ground is that that can change  
11 so quickly during the course of the day. And, also,  
12 to be able to measure a half inch of frost on the  
13 surface of a field is going to be difficult because  
14 frost in large fields is going to vary so much that  
15 it's troublesome and it's not particularly helpful.

16 Q. Does it become any easier to measure two  
17 inches?

18 A. I think it would.

19 Q. Why is that?

20 A. Well, the reason -- well, two inches is  
21 because it won't change so quickly during the day,  
22 and also there's -- it takes enough -- enough cold  
23 temperature duration to accumulate that much frost  
24 and it's going to be probably more widespread across

1 the field.

2 Q. Is it difficult to determine whether there  
3 is frost at the surface of the soil?

4 A. No, it's not difficult to determine. I  
5 mean, you can go out there and take a quick look at  
6 the field and you can tell if the surface is frozen,  
7 but you can't necessarily tell how deep it is, nor  
8 can you get -- nor is it easy to get an average  
9 across the field --

10 Q. Thank you.

11 A. -- which seems to be what the regulation  
12 is prescribing.

13 MS. DEXTER: That's all I have for  
14 follow-up.

15 HEARING OFFICER: Noting, of course, that  
16 the Agency indicated it had witnesses, why don't we  
17 remain with you, Ms. Dexter, if you had your own  
18 follow-ups for Dr. Funk on the basis of his  
19 testimony.

20 BY MS. DEXTER:

21 Q. So, I didn't introduce myself, but I'm  
22 Jessica Dexter and I work at the Environmental Law &  
23 Policy Center, but I'm speaking on behalf --

24 HEARING OFFICER: Ms. Dexter, I'm sorry if



1 I interrupt, but I think if the microphone is closer  
2 to your face, it will be a little easier.

3 MS. DEXTER: I will try and get right up  
4 on it.

5 BY MS. DEXTER:

6 Q. So, how many of the LMFA waste management  
7 plans have been reviewed and approved by the  
8 Illinois Department of Agriculture? Do you know?

9 A. I do not have that number.

10 Q. All right. Do you know whether the state  
11 is doing random compliance checks to determine  
12 whether livestock operations are following with  
13 management plans required by the LMFA?

14 A. Again, I don't know if they're doing  
15 random checks. I know that they have in the past.

16 Q. I don't want to be tedious, but do you --  
17 are you aware of a number -- statistics on the  
18 compliance rate with the waste management plans?

19 A. No, I'm not.

20 Q. What size of operations are required to  
21 submit their waste management plans to the  
22 Department of Agriculture?

23 A. If they manage over 5,000 animal units, as  
24 defined in the LMFA, then they're required to submit

1 the plan for approval. And, also, if they have --  
2 if they have over 50 percent interest in  
3 accumulation of operations across the state and that  
4 is more than 5,000 animal units, then they're  
5 required to submit all of those plans for approval.

6 Q. And in the instance of large unpermitted  
7 livestock operations, between 1,000 and 5,000 animal  
8 units which don't have to submit their waste  
9 management plans under the LMFA, how do we know  
10 whether those plans are in compliance with the  
11 standards?

12 A. That is -- the assumption is that they are  
13 following the regulation and they have a  
14 certified -- a letter certifying that they have a  
15 plan available that has to be submitted to the  
16 department.

17 Q. So, under the LMFA, is there a requirement  
18 that a waste management plan must include  
19 application setbacks from conduits to surface water?

20 A. There is the requirement that they have  
21 setbacks from waterways and setbacks from the  
22 surface waters themselves. And those are in  
23 900.803.

24 Q. I'm not actually asking about the waterway

1     itself; I'm asking about the conduit to the  
2     waterway.

3             A.     The conduit to the waterway?

4             Q.     Yes.

5             A.     I'm not exactly sure what you mean by  
6     conduit to waterway because, in most cases, a grass  
7     waterway is considered a conduit in the proposed  
8     regulation.  Is that -- I believe that's correct.

9             Q.     Does -- under the LMFA, do waste  
10    management plans require restrictions on land  
11    application when rain or snow is forecast?  Is that  
12    required under the LMFA?

13            A.     I don't believe so.

14            Q.     Under the LMFA, is there a ban on further  
15    application when soil test phosphorus reaches a  
16    certain concentration?

17            A.     There is only the restriction that the  
18    phosphorus-based application rate be used if the  
19    soil test phosphorus reaches 300 pounds per acre.

20            Q.     Under the LMFA, is there a prohibition on  
21    causing runoff to surface waters during  
22    nonprecipitation events?

23            A.     That is covered in the existing  
24    livestock pollution regulation, I believe, so it is

1 already -- it is assumed by the LMFA, yes.

2 Q. It is assumed?

3 A. Well, in all situations you are required  
4 to -- are prohibited from discharging livestock  
5 waste into waters in the U.S.

6 Q. Under the LMFA or under the Environmental  
7 Protection Act?

8 A. Under the Environmental Protection Act.

9 Q. Okay. Under the LMFA, is there a  
10 requirement for a winter application plan that  
11 involves assessing multiple factors related to  
12 nutrient transport?

13 A. No, there's not a specific winter  
14 application plan.

15 Q. Does the LMFA require pursuit of practical  
16 alternative measures before surface application  
17 waste is allowed on frozen and snow-covered ground?

18 A. Only insofar as the requirement to have a  
19 sufficient amount of storage for a certain number of  
20 days and also the requirement to -- that prohibits  
21 application on greater than five percent slopes.

22 MS. WILLIAMS: Can I ask a quick follow-up  
23 on that?

24 MS. DEXTER: Go ahead.

1 MS. WILLIAMS: If a piece of -- if a field  
2 has greater than five percent slope, under the LMFA  
3 is it allowable to apply to that field when it's  
4 snow-covered if adequate erosion control practices  
5 are in place?

6 DR. FUNK: I believe -- I believe it would  
7 be.

8 HEARING OFFICER: Anything further,  
9 Ms. Williams?

10 MS. WILLIAMS: Not on this point.

11 MS. MANNING: Could I ask a follow-up on  
12 that line of questioning as well?

13 MS. DEXTER: I'm not finished with that  
14 line of questioning.

15 MS. MANNING: All right. Go right ahead  
16 then.

17 BY MS. DEXTER:

18 Q. Does the LMFA consider the requirement  
19 that application equipment be inspected and  
20 calibrated?

21 A. I do not recall.

22 Q. Does the LMFA prohibit application within  
23 a quarter mile of a non-farm residence?

24 A. It does unless the winter is, you know --

1 THE REPORTER: I'm sorry, I'm having a  
2 really hard time hearing with the drill out here or  
3 whatever it is.

4 DR. FUNK: The question was? Go ahead and  
5 repeat.

6 BY MS. DEXTER:

7 Q. I'm sorry, the question was whether or not  
8 the LMFA prohibits application within a quarter mile  
9 of a non-farm residence.

10 A. Yes, the LMFA prohibits application within  
11 a quarter of a mile of a non-farm residence, unless  
12 the manure is applied by injection or it's  
13 incorporated within -- on the same day.

14 Q. All right. Does the LMFA restrict  
15 application to sites with a tolerable level of soil  
16 loss and the soil phosphorus level is equal to or  
17 greater than 300 pounds per acre?

18 A. It does restrict application insofar as --  
19 if the soil phosphorus level is 300 pounds or  
20 greater, it restricts the application rate to  
21 phosphorus-based.

22 Q. Is there a companion soil loss factor  
23 that's considered there?

24 A. Only insofar as the general suggestion

1 that the soil -- that adequate soil loss erosion  
2 practices are existing.

3 Q. Does the LMFA require livestock operators  
4 to do a nutrient transport potential assessment for  
5 each field, similar to what is proposed in the  
6 proposed 502.615?

7 A. Not specifically.

8 Q. In the proposed rule, the information  
9 collected for field assessments is to determine  
10 appropriate phosphorus-based or nitrogen-based  
11 application rates, which you mentioned a minute or  
12 two ago.

13 Does the LMFA allow livestock operators to  
14 choose between nitrogen-based and phosphorus-based  
15 application rates based solely on the phosphorus  
16 content of the soil?

17 A. It allows -- no, it requires  
18 phosphorus-based application when the -- if the  
19 phosphorus content reaches a certain level.

20 Q. Let me try and rephrase that. Is that  
21 based -- the trigger is only the phosphorus level  
22 for phosphorus-based or nitrogen-based?

23 A. Yes, there's always a nitrogen-based cap,  
24 that is you're not allowed to over-apply nitrogen on

1 an annual rate.

2 Q. Okay. Does the LMFA require that the  
3 applicator consider soil type, slope, soil  
4 erodibility or distance to surface water when  
5 deciding whether or not it should be  
6 phosphorus-based or nitrogen-based?

7 A. No, and those are not specifically --  
8 again, those are incorporated to some extent in the  
9 other setback requirements that are in the  
10 regulation.

11 Q. In your pre-filed testimony, you agree  
12 that sufficient manure storage should be required to  
13 avoid the need to land apply manure in the winter.  
14 Can you explain why winter manure application should  
15 be avoided?

16 A. Well, I think we all recognize that in the  
17 winter, especially in the cropping sequences that we  
18 use in Illinois, a lot of corn and soybeans, in many  
19 cases there's no -- not a lot of surface residue  
20 left on the soil, so there's less opportunity for,  
21 you know, for nutrients and runoff to be held by  
22 surface residue. There's no growing crops, unless  
23 you have wheat or a permanent pasture.

24 And, also, we all recognize that frozen



1 soil has less infiltration capacity; snow-covered  
2 soil has the opportunity for runoff with snow melt  
3 to carry some of the manure nutrients with it; and  
4 then, of course, ice-covered soil has very little  
5 infiltration, little or no infiltration capacity.

6 So, those situations do make it a very  
7 risky business if there's any slope to the soil and  
8 if it's somewhat close to surface water for  
9 nutrients to reach surface water more so in the  
10 winter.

11 Q. Also, in your pre-filed testimony, you  
12 criticize the setbacks that IEPA has proposed when  
13 winter manure spreading does occur.

14 Do you have any studies showing what  
15 alternative setback distances will protect against  
16 water pollution or discharge when manure is spread  
17 on snow-covered or ice-covered land?

18 A. No. And as Dr. James' testimony  
19 indicates, any such research is very scant. I don't  
20 know of any that has been done to really put numbers  
21 on that in those conditions.

22 Q. What sort of water quality research have  
23 you done to determine whether the LMFA land  
24 application setbacks are adequate in both the winter

1 and non-winter seasons?

2 A. I'm not a researcher myself, so I do have  
3 to rely on the studies of others. What I am relying  
4 on in my educational efforts for livestock producers  
5 is the body of evidence, the body of experience  
6 across the industry that indicates that those are --  
7 those are commonsense setbacks.

8 Q. So, it's a commonsense argument, not a  
9 scientific argument?

10 A. It is a -- it is a scientific argument  
11 insofar as there are many conditions, many variables  
12 that can effect nutrient transport and I believe  
13 that the setbacks that have been used in the LMFA  
14 represent a good overall -- a good overall approach  
15 to protecting water quality.

16 MR. RAO: May I ask a follow-up?

17 MS. DEXTER: Yes.

18 MR. RAO: Regarding these setbacks getting  
19 weaker applications, in your testimony you also  
20 mentioned they are burdensome to implement. Could  
21 you explain why they're burdensome.

22 DR. FUNK: Yes. When -- if you were to  
23 produce a manure nutrient management plan for a  
24 field, you have to go out and you have to have a --

1 you have to -- if there are surface waters or  
2 conduits in the field, you have to come up with the  
3 maps in a way to implement those boundaries of where  
4 you can and cannot apply manure.

5 And I think to come up with another set  
6 of -- one or two more sets of setbacks for different  
7 weather conditions makes it very confusing to an  
8 operator who may be, you know, handing the map or  
9 the information to a custom manure applicator or to  
10 an employee and say, "Go spread the manure based on  
11 these stipulations," and they are different from one  
12 season to the next.

13 MR. RAO: So, do you have any alternate  
14 recommendations to address the concerns with manure  
15 application instead of what's being proposed by the  
16 Agency?

17 DR. FUNK: Well, I think in general if we  
18 go to the nutrient transport recommendations that  
19 would be produced for a field during the  
20 comprehensive nutrient management planning process,  
21 for instance, that NRCS uses, those -- that would  
22 then point out the critical slopes, the critical  
23 situations where runoff might occur and that the --  
24 for each site-specific -- each field, the producer

1 would be able to make better decisions on when to  
2 apply, how much to apply and what those restrictions  
3 would be.

4 I think it just is a better overall  
5 process using a site-specific, field-by-field  
6 assessment rather than to just come up with a  
7 blanket setback number from surface water.

8 MR. RAO: And those requirements are  
9 already part of the proposed regulations, is it not,  
10 for the nutrient management plan to come to all  
11 these factors that you mentioned?

12 DR. FUNK: Those are already included in  
13 the CNMP process whereby a technical service  
14 provider would look at the field and the various  
15 factors, the resource concerns and would then  
16 determine what the setbacks should be, so they're  
17 more site-specific than just increasing a number on  
18 a map, just putting a greater distance in a setback.

19 MR. RAO: And it's your opinion then that  
20 going through this detailed nutrient management  
21 plan, you know, calculating for however they come up  
22 with the setbacks for the plan, is less complicated  
23 than just measuring the setbacks from, you know,  
24 waterways and conduits that the Agency has proposed?

1 DR. FUNK: I think it's more useful  
2 because it's built in with the cropping practices;  
3 it's built in with the crop rotations, tillage  
4 practices and those things which -- and those are  
5 fully supported by the NRCS, the CNMP practice code.  
6 And, as I say, it's I think less confusing to have a  
7 single set of field assessments rather than have  
8 another set of setbacks that are -- that are  
9 superimposed on something that's already in place.

10 MR. RAO: Thank you.

11 EXAMINATION

12 BY MS. WILLIAMS:

13 Q. Dr. Funk, can you explain for the Board  
14 which producers are required to use the CNMP process  
15 you're describing?

16 A. Okay. The CNMP process is something  
17 that's carried out -- it's supported by NRCS through  
18 the state practice code and it's available to any  
19 producer.

20 It is not a requirement, but it is --  
21 well, it is a requirement for NRCS in order for a  
22 producer to engage in and cooperate with certain  
23 kinds of cost-sharing programs.

24 So, for instance, if a producer were to

1 apply through NRCS for the Environmental Quality  
2 Incentives Program, many times he has to have the  
3 comprehensive nutrient management plan in place  
4 in order to be qualified for that. And so the CNMP  
5 comprehensive describes it very well because it goes  
6 all the way from existing practices, existing  
7 facilities and the land application fields to what  
8 he proposes -- if he has some kind of a resource  
9 concern that he wants to address, then it also puts  
10 forth proposals for how those could be addressed and  
11 it also includes other fields and other land  
12 application fields and so on.

13 So, any livestock producer in the state  
14 can use a CNMP and it's often a requirement in order  
15 to participate in certain programs where you're  
16 trying to improve various aspects of the operation,  
17 such as adding new manure storage or something like  
18 that.

19 MS. WILLIAMS: Do you want to maybe flesh  
20 out -- I mean, I don't want to get off anyone's line  
21 of questioning.

22 MS. DEXTER: That's all right, I just was  
23 going to ask a follow-up on your follow-up.

24 BY MS. WILLIAMS:

1           Q.    I think it might be helpful to flesh out  
2           for the Board a little bit your testimony that the  
3           CNMPs that you are describing are even more rigorous  
4           than waste management plans under the LMFA.  Can you  
5           just sort of give a little bit of an expanded  
6           explanation of that?

7           A.    Right.  The LMFA manure management plan,  
8           in some ways it's basic, in some ways it does make  
9           some assumptions about what the producers already do  
10          and what they -- what their intentions are in  
11          managing manure.

12                    The CNMP process is more rigorous in that  
13          it looks at a lot of different aspects of the soil,  
14          water, air, and it is -- it's more rigorous because  
15          it asks for accountability for producers who are  
16          then going to use, for instance, public money to  
17          help them reach certain goals.

18                    So, in many ways, the CNMP, if it's done  
19          carefully, is a very useful tool for both the -- for  
20          getting today's picture of how an operation works,  
21          but also what the -- what proposed changes might do  
22          for the operation.

23                    MS. WILLIAMS:  Thank you.

24

EXAMINATION

1 BY MS. DEXTER:

2 Q. Are CNMPs voluntary, unless they're  
3 required for seeking an incentive like you --

4 A. Yes, the CNMP is voluntary, but it is also  
5 recognized, for instance, I believe in the federal  
6 CAFO regulation as being sufficient for a nutrient  
7 management plan in general under the regulation.

8 Q. Can you give us a sense of how many  
9 livestock operations have CNMPs? I don't know  
10 whether you want to do that as a percentage or --

11 A. Yeah, I really, I don't know. I would  
12 hate to venture a guess. I suspect that the midsize  
13 to larger operations in general have a higher  
14 percentage of CNMPs than the smaller. It is a  
15 rather expensive process to go through.

16 EXAMINATION

17 BY MS. WILLIAMS:

18 Q. Do you know about how expensive?

19 A. I've heard numbers that average between  
20 \$4,000 and \$10,000 for a plan. And it does  
21 represent a large amount of effort on the basis --  
22 on the part of the consultant in order to do all the  
23 parts of that scheme.

24 We just completed a training of technical



1 service providers, a five-week training which  
2 culminated in two days on campus where we had our  
3 consultants go over an example farm and talk about  
4 the various -- so, it is a very -- it's a complex  
5 process that takes a lot of time and a lot of data  
6 gathering on the part of the consultant and the  
7 producer.

8 Q. And does the consultant have to be  
9 certified?

10 A. Yes, the consultant has to go through a  
11 certification process that has continuing education,  
12 and I believe it's a three-year recertification  
13 process.

14 Q. And who does the certification?

15 A. The national and state NRCS offices  
16 provide the certification.

17 Q. And when you are conducting -- you said  
18 you just had a training?

19 A. Yes.

20 Q. Can you explain a little more who you were  
21 training, what you were training them on?

22 A. Yes, the CNMP registration or the  
23 technical service provider, sorry, technical service  
24 provider registration process includes, as one

1 component, an educational component as well as the  
2 training, background, qualifications of the  
3 consultant, and so we are providing the training  
4 component, which was -- which was certified -- which  
5 was verified by the state and national NRCS offices,  
6 so they looked over all the training components.

7 So, we were training consultants who were  
8 then going to be writing all or parts of the CNMPs  
9 for the producers. And these consultants can be  
10 registered to do one part or various parts of the  
11 plan. Some of them are agronomists and only do the  
12 land treatment parts. Some are engineers who are  
13 only interested in doing the facility parts.

14 Q. Now, do you yourself ever write plans?

15 A. I do not.

16 MS. WILLIAMS: I'm sorry if I digressed.  
17 I just thought it would be helpful for --

18 EXAMINATION

19 BY MS. DEXTER:

20 Q. Getting back to the questioning, we were  
21 talking about setback distances in the context of  
22 winter manure application.

23 Have you monitored receiving waters to  
24 determine whether there are any negative water

1 quality impacts of land application livestock waste  
2 that's done according to LMFA requirements?

3 A. No, I have not myself.

4 Q. Are you aware of any monitoring that shows  
5 there are not negative water quality impacts?

6 A. Not directly, no.

7 Q. In your pre-filed testimony, you claimed  
8 that the rules proposed by IEPA would have "no  
9 verifiable impact on water quality." Do you  
10 consider yourself an expert on water quality?

11 A. No.

12 Q. Are you responsible for watershed planning  
13 or other efforts to address pollution impairments of  
14 streams, rivers or lakes at a watershed scale?

15 A. No.

16 Q. Have you ever designed or participated in  
17 a scientific study that measures impacts on water  
18 quality from specific livestock waste management  
19 practices?

20 A. No.

21 Q. Can you point to any scientific study as  
22 the basis for your statement that the proposed rule  
23 will have no verifiable impact on water quality?

24 A. I think I could, but I would have to look

1 back in my -- I would have to go back and do some  
2 gathering of data to find those studies.

3 Q. Do you know the nature of those studies --

4 A. Today? No.

5 Q. -- that you would be looking for?

6 A. Yes, I would be looking for -- looking  
7 across the body of work that's been done for -- in  
8 the various states across -- the land grant  
9 university studies that have looked at this for  
10 probably the last 20 years.

11 Q. And how would those studies -- the  
12 existence of studies isn't necessarily --

13 THE REPORTER: I'm sorry, you're going to  
14 have to --

15 BY MS. DEXTER:

16 Q. The existence of studies isn't the same  
17 thing as relating those studies to a statement that  
18 there will be no verifiable water quality impact?

19 A. Yes.

20 Q. Are you aware that in the 2010 Illinois  
21 Integrated Water Quality Report, also sometimes  
22 known as the 305(b) report, the IEPA classified crop  
23 production as the potential source of impairment for  
24 over 2,000 stream miles and animal feeding

1 operations as the potential source of impairment for  
2 over 600 stream miles?

3 A. That was in the Illinois --

4 Q. I'm just wondering if you're familiar with  
5 that study as the basis for your statement that  
6 there's no negative water quality impacts.

7 A. Well, yes. What I'm -- what I'm  
8 comparing -- what I'm saying is that based on my  
9 experience, I don't believe that the imposition of  
10 the larger setbacks that we're talking about would  
11 necessarily have a verifiable impact on what we're  
12 seeing. Based on my experience, that's --

13 MS. DEXTER: I think that's all I have for  
14 now.

15 HEARING OFFICER: Very good. Ms. Manning,  
16 I think you indicated that you had had a follow-up  
17 question earlier. I didn't want to lose sight of  
18 that. I believe you indicated it pertained to the  
19 LMFA plans.

20 EXAMINATION

21 BY MS. MANNING:

22 Q. The follow-up, I guess, Dr. Funk, would  
23 be -- just so the Board understands, it appears that  
24 there's three sets of requirements that a producer

1 may need to follow related to waste management  
2 plans, the Livestock Management Facilities' waste  
3 management plans, NRCS and the proposal here by the  
4 Agency under the CAFO rules would be yet a third  
5 set?

6 A. Yes.

7 Q. Is that correct?

8 A. That is correct.

9 Q. And could you elaborate on how those three  
10 segueway?

11 A. Well, yes, there are three separate plans  
12 and, as you say, the CNMP, through the NRCS, is  
13 available to anybody and it is very, very  
14 all-encompassing.

15 The LMFA does affect the larger facilities  
16 in the state; it is a state-specific regulation.  
17 And then the NPDES CAFO permit rule is another that  
18 strives to do the same thing as the other two in  
19 regards to water quality.

20 Q. And it would be your position here, as I  
21 understand it then, that whatever waste management,  
22 nutrient management plan is developed pursuant to  
23 these rules on the basis of the Agency's proposal  
24 ought to be as consistent as possible with those

1 waste management plans that are already required  
2 under the Livestock Management Facilities Act,  
3 another state program; is that correct?

4 A. That is correct. I think it's  
5 counterproductive to produce another set of  
6 regulations to do essentially the same thing.

7 Q. Thank you.

8 A. And I recognize that there are -- that  
9 there are nuances in the language in the proposed  
10 regulation that seem to cover other things, but I  
11 believe if we go back to the intent, for instance,  
12 of the LMFA, we will find that many of the setbacks  
13 and the storage requirements and so on, those are in  
14 most cases covered by the LMFA already.

15 And that's my contention, that someone who  
16 has an LMFA-based plan, that plan should be  
17 recognized as being protective of ground and surface  
18 water and adequate in this situation.

19 MS. MANNING: Thank you.

20 MR. RAO: May I ask a follow-up? In your  
21 testimony on Page 2, when you talk about this  
22 nutrient management plan, you recommend that the  
23 Board, you know, recognize these --

24 THE REPORTER: I'm sorry, can you speak

1 into the microphone?

2 MR. RAO: Can you hear me?

3 THE REPORTER: Yes.

4 MR. RAO: When you talk about this manure  
5 management plan, you recommend that the Board  
6 recognize these plans for unpermitted large CAFOs  
7 and I just wanted to, you know, again satisfy  
8 whether are you talking about only unpermitted  
9 CAFOs, or your recommendation is for generally all  
10 CAFOs, even those that may require permits?

11 MR. FUNK: My concern, since the universe  
12 of large CAFOs is much bigger than just those for  
13 which we are considering permits, is that those also  
14 will be -- that those large CAFOs, unpermitted  
15 CAFOs, would be -- would have their plans recognized  
16 as being eligible for -- we're talking about the  
17 agricultural storm water exemption.

18 MR. RAO: Because when I read your  
19 testimony, I thought maybe you were just focusing on  
20 the unpermitted CAFOs and you were okay with the  
21 proposed rules for the NPDES.

22 DR. FUNK: Well, I recognize that for the  
23 NPDES permit, the federal regulation requires  
24 certain kinds of things that may not be written



1 directly into, for instance, the LMFA. And I know  
2 that there are some recordkeeping requirements and  
3 things like that that may not be specifically  
4 required. So, as I say, I am concerned that the  
5 unpermitted large CAFOs, those plans being  
6 recognized, because it's embodied in the text of the  
7 regulation in many cases. The new draft proposal  
8 does address the unpermitted large CAFOs.

9 MR. RAO: Yeah, that's the other question  
10 I had. When the regulations address these  
11 unpermitted CAFOs, it generally cites to the extent  
12 only what's required under Section 503.510.

13 If I read this, it says the nutrient  
14 management plan must certify and demonstrate,  
15 you know, that they comply with certain  
16 requirements, but they are not subject to all the  
17 requirements that the Agency has proposed and the  
18 rules do not certify that they have to comply with  
19 the 505 -- 502.505 requirements for unpermitted  
20 CAFOs. How do you view those requirements?

21 DR. FUNK: It still appears to me that  
22 there are some extra requirements that would not  
23 allow agricultural storm water runoff to be exempt  
24 for those facilities.

1 MR. RAO: Okay. Thank you.

2 HEARING OFFICER: Ms. Dexter, you  
3 indicated that for the time being --

4 MS. DEXTER: I might have follow-ups today  
5 based on those questions.

6 HEARING OFFICER: Very good.

7 EXAMINATION

8 BY MS. WILLIAMS:

9 Q. First, I just want to thank you for being  
10 here, Dr. Funk. I know the Board has some issues  
11 that they're interested in particular that I think  
12 some were covered in your testimony, but I'm going  
13 to want to flesh it out quite a bit more, so if you  
14 want to get a chair, or are you comfortable?

15 A. I'm fine.

16 Q. Okay, good. You mentioned in your  
17 testimony that the Agency developed a stakeholders  
18 group to discuss phosphorus and winter spreading and  
19 you were a member of that group, correct?

20 Would you agree that this -- these two  
21 topics that were selected for discussion are two of  
22 the thornier issues that we deal with in this area?

23 A. Yes, absolutely.

24 Q. Can you explain a little bit why.

1           A.    Well, of course, the phosphorus is an  
2    issue because we're all concerned about phosphorus  
3    runoff possibly getting into waters of the state,  
4    and that there are -- there's always been concern  
5    about -- and some confusion about the correlation  
6    between phosphorus concentration in a field and in  
7    soil and the potential for that to go into the  
8    surface runoff.  There are --

9           Q.    Do you believe that this issue of  
10   phosphorus, the potential for phosphorus runoff in  
11   particular, has already been adequately addressed in  
12   the LMFA, or do you think further regulation on this  
13   topic was necessary?

14          A.    I think that with the evolution of the  
15   manure management planning process, those major  
16   points in the LMFA are adequate for addressing  
17   phosphorus runoff.

18          Q.    I don't understand.  How can you say with  
19   the development?  Can you just explain a little  
20   better?  I mean, it doesn't -- I'm not sure if  
21   you're answering the question or not.

22          A.    No, what I -- well --

23          Q.    Does the LMFA adequately protect waters of  
24   the state from phosphorus runoff, or does it try to?

1           A.    Yes, I think it definitely does try to.  
2    Those phosphorus issues were recognized when the  
3    LMFA was written.  The LMFA recognized the  
4    importance of the setbacks and that the main factor  
5    in attenuating phosphorus getting into surface water  
6    is distance from the water, more important than  
7    anything else.

8           But, of course, the working group was  
9    looking at other specific instances, such as whether  
10   conduits can more readily take surface runoff more  
11   quickly to surface waters of the state without  
12   attenuation.  And we recognize that there are  
13   situations where that might happen, and that's all  
14   the more reason to have this field-specific,  
15   site-by-site plan for land application of manure.

16          Q.    And just to be clear, so that we  
17   understand, the field-specific plan is what's  
18   required under the CNMP --

19          A.    Under the CNMP.

20          Q.    -- or under 502.615 of the agency  
21   regulations, correct?

22          A.    Yes.  And the other -- the other part  
23   about the winter spreading --

24          Q.    Yes, that's what -- thank you.

1           A.    And certainly the working group needed to  
2    address that because that has been an issue over the  
3    years.  We know that some things are changing; even  
4    climate change is occurring for one reason or  
5    another and we know that the severity and the  
6    frequency of precipitation events and changes in the  
7    climate have been occurring, which have made some of  
8    our bold assumptions on how to size storages and how  
9    we plan land application events, it has required us  
10   to just kind of take another look at those.

11                So, I think on the front end of the winter  
12   application plan, it is very important that we  
13   address adequate storage in order to get -- have  
14   enough manure storage to get us through those times  
15   when we cannot apply manure in good conditions.

16               MR. RAO:  Dr. Funk, regarding adequate  
17   storage for winter, you did mention in your  
18   testimony a very important factor.  The Agency has  
19   proposed 120 days' storage capacity.  We also  
20   received testimony recommending increasing that  
21   storage capacity to 180 days or six months.  Based  
22   on your experience, what would you think would be  
23   appropriate storage?

24               DR. FUNK:  Well, as I understood the

1 conversation about the storage, that was the 120-day  
2 storage capacity going into the winter season, so --  
3 and from December 1 -- so that was not the total  
4 storage capacity, but the suggestion that the  
5 production facility would have 120 days' storage  
6 available to get through December, January,  
7 February, so that's recognized.

8           Of course, the regulation already requires  
9 virtually six months of storage and all of our --  
10 all of our producers, all the production facilities  
11 that are going in now have at least six months'  
12 storage and many of them have closer to a year of  
13 storage for liquid manure.

14           So, I think the 120-day storage is  
15 probably reasonable going into winter, but that's  
16 recognized that that's not necessarily the entire  
17 storage capacity, but it's what's available and it's  
18 the minimum available.

19           MR. RAO: Do you think that they need to  
20 maintain additional storage for at least three  
21 months, or it's part of the overall storage  
22 capacity?

23           DR. FUNK: No, it's part of the overall  
24 storage capacity. But, for instance, if we had a

1 deep pit swine facility, we would hope that they  
2 would be -- they would have that facility pumped  
3 down to the point where they had an additional 120  
4 days -- well, they then have 120-day storage  
5 capacity to get them through from December 1st.

6 MR. RAO: Yeah, that's the number --

7 DR. FUNK: Not adding storage capacity,  
8 but management of their existing storage. If it  
9 takes other storage capacity, that's fine, you know,  
10 if they can locate storage in another facility to  
11 give them that extra buffer.

12 MR. RAO: Also, you know, could you tell  
13 us how prevalent this winter application is in the  
14 state?

15 DR. FUNK: I don't think it's very  
16 prevalent at all. What we are seeing -- it's hard  
17 to find a normal year, normal crop year, but usually  
18 in the fall, we will see most of our liquid manure  
19 storage is pumped down shortly after the corn and  
20 soybean crops come off, and so those are essentially  
21 emptied out during that time, so they have much more  
22 than the 120-day storage capacity.

23 MR. RAO: So, would you say it's very rare  
24 to have winter application?

1 DR. FUNK: I would consider it rather  
2 rare. And, again, I spoke with one of our custom  
3 manure applicators yesterday about the aptitude of  
4 the winter application situation. When we talked  
5 about the frozen ground sort of thing, he said we  
6 very seldom see winter application of very much  
7 volume going on nowadays. Once in a while you will  
8 see perhaps a small acreage that gets winter  
9 application of manure, but not very much.

10 MR. RAO: Thank you, Dr. Funk.

11 EXAMINATION

12 BY MS. WILLIAMS:

13 Q. Dr. Funk, staying on the topic of winter  
14 application, you talked a little bit about frozen  
15 ground, ice-covered ground, snow-covered ground and  
16 I believe you mentioned earlier that if you had a  
17 field that was covered in ice, there would be --  
18 would you describe zero infiltration or minimal? I  
19 forget the phrase that you used to describe  
20 infiltration on ice-covered --

21 A. Right, I think it's reasonable to say that  
22 if it's ice-covered, it's essentially zero  
23 infiltration until the ice melts, and at that time  
24 you might very well have some infiltration, but it's



1 going to depend on the conditions beneath, whether  
2 it's actually frozen beneath.

3 Q. And if there were, say, to be rainfall or  
4 something while the ice were still there, the manure  
5 would be likely to just run off?

6 A. Certainly you could have some, yeah,  
7 runoff. And it depends. Back to the slope of the  
8 soil and -- is there other cover? There may be --  
9 it may be ice-covered, but there may be a  
10 substantial amount of crop residue left on the  
11 surface.

12 Q. Crop residue? So, the amount of crop  
13 residue would effect how much of the manure would  
14 get to surface water?

15 A. I would expect the amount of crop residue  
16 to have quite an effect. And the more crop residue,  
17 the better -- the more attenuation you would find in  
18 the amount of manure nutrients that are reaching --  
19 that are leaving the field.

20 Q. What are some other factors that would  
21 effect the amount of manure that left the field in  
22 an ice-covered situation?

23 A. In an ice-covered situation?

24 Q. Or snow-covered. Maybe if we could

1 combine those two. If not --

2 A. Ice or snow, certainly the outside  
3 temperature and how fast the thaw was occurring, the  
4 slope, distance.

5 Q. Distance to what?

6 A. Distance to -- well, in this case, we're  
7 talking the edge of the field. But if you're  
8 talking about impact on surface water, it's distance  
9 to surface water and whether there are vegetative  
10 buffers, whether there are other areas that would be  
11 intervening before the flow got to surface water.

12 Q. Have you reviewed any studies about the  
13 benefits of vegetative buffers in these  
14 circumstances? Do you have any expertise that would  
15 be helpful to the Board on this topic?

16 A. Well, I think if we could go back to the  
17 general recommendation even on the federal  
18 regulation side where they talk about a 35-foot  
19 vegetative buffer being something that's pretty  
20 often accepted as something that would attenuate  
21 runoff going to whether it be field tile inlets or  
22 ditches, conduits or things like that, so -- and you  
23 will see in the federal regulation a big difference  
24 between -- they will quote a 100-foot setback for a

1 non-vegetative buffer versus 35 foot for a  
2 vegetative buffer.

3 Q. But have you heard or read any literature  
4 that would lead you to question whether that's  
5 adequate in winter conditions?

6 A. No.

7 Q. Now I would like to talk a little bit  
8 about -- go back to the topic of frozen ground and  
9 anything that you could provide to help us  
10 understand the amount of infiltration that can be  
11 expected to occur when ground is frozen.

12 A. I would have to point you toward the  
13 studies that the U.S. EPA set forth in their  
14 technical --

15 Q. Is it your understanding that those  
16 studies suggest there's almost no infiltration?

17 A. There's not -- yes, there's not much  
18 infiltration on frozen ground.

19 Q. Do you know if there was any analysis of  
20 how -- of this issue that we're struggling with  
21 here, the depth, the degree to which the ground is  
22 frozen, how deep in those studies?

23 A. No, I don't know, and I don't think there  
24 is -- I really don't think there's been much study

1 done in comparing those.

2 Q. Does the LMFA define frozen ground for us?

3 A. Not that I recall.

4 Q. So, you don't necessarily have any  
5 information that would help us know whether ground  
6 that is frozen to half an inch has greater  
7 infiltration than ground that's frozen to two inches  
8 or less infiltration than ground that's frozen to  
9 two inches?

10 A. It would be my expectation that ground  
11 frozen only to a half inch would be subject to  
12 fairly -- could be subject to fairly rapid thawing.  
13 And at that point, if the ground beneath were dry,  
14 then it could -- it could experience a fair amount  
15 of infiltration.

16 Q. So, that would be the technical issue  
17 then? Not so much whether the ground is just frozen  
18 on top effecting infiltration, but if it's just  
19 frozen on top, there's hope that the next day we'll  
20 get a warming and then maybe potentially if weather  
21 conditions are adequate you would get infiltration  
22 at that point?

23 A. I think that would be reasonable, yes.

24 Q. That would be the idea? Okay. Do you

1 know to what depth of freezing is typical to expect  
2 injection equipment to be able to be used?

3 A. I would think anything less than, say, two  
4 inches of frost, injection equipment should be able  
5 to penetrate with no trouble.

6 Q. And what about incorporation?

7 A. Incorporation, say, with a disc or a  
8 chisel plow might be somewhat less, but certainly  
9 with a disc it would be hard to penetrate two inches  
10 of frost I think, but a chisel plow you could.

11 Q. And would you agree that if the ground was  
12 frozen even just on the surface that the better  
13 management practice for applying manure would be to  
14 inject or incorporate?

15 A. Yes, unless there were no slope. If it  
16 was a piece of flat ground with some crop residue on  
17 the surface, it may not be an issue.

18 Q. So, you're saying if you had a very  
19 low-risk field, surface application might be  
20 equivalent to injection or incorporation?

21 A. Well, it's never equivalent because  
22 injection puts the nutrients down in the soil  
23 profile, but it could be not environmentally risky  
24 if it were a piece of flat ground.

1 Q. Thank you.

2 A. Again, that's -- I refer back to that kind  
3 of commonsense approach and the field-by-field  
4 assessment of what is a good place to apply in  
5 winter if you're faced with that predicament.

6 Q. And you would agree that fields with  
7 greater slopes are going to have a greater risk of  
8 runoff during winter application?

9 A. That would be generally true, yes. And,  
10 again, the distance to surface water or to a conduit  
11 is the other side of that issue, but you would  
12 certainly expect surface-applied manure on,  
13 for instance, ice-covered or snow-covered ground to  
14 then move offsite once thawing occurs.

15 Q. Okay. So, one of the sections -- well,  
16 you testified to the Board -- let me go back. You  
17 testified to the Board that certain aspects of the  
18 winter application provision were overly burdensome  
19 or arbitrary; is that correct?

20 A. Yes, and that was -- I was referring to  
21 the multiplication -- for instance, the  
22 multiplication of the setbacks based on slope of the  
23 field and --

24 Q. And that was Section 502.630(c)(4)?

1 A. Right, yes.

2 Q. Or (c)(5), I'm sorry, (c)(5) I believe.

3 A. Yes.

4 Q. And the other one that you mentioned was  
5 (c)(4) specifically. Those are the two sections,  
6 correct, that you've asked the Board to delete?

7 A. To consider deleting, yes.

8 Q. Are there any other sections than 630 that  
9 you would consider arbitrary?

10 A. Not that I can recall, no.

11 MR. RAO: Pardon me.

12 DR. FUNK: Yes?

13 MR. RAO: Just for clarification,  
14 Section 502.630(c)(4) does not deal with setbacks,  
15 so could you please take a look at it and tell us  
16 if -- (c)(5) is a setback.

17 DR. FUNK: (c)(5).

18 MR. RAO: And (c)(6) gives the setback.

19 DR. FUNK: Okay. (c)(4), the reason I  
20 mentioned (c)(4) was we were talking about surface  
21 runoff, the combination of the RUSLE 2 evaluation on  
22 a slope and the phosphorus soil test on that slope,  
23 and so for -- I don't see where the soil test on  
24 that particular slope has a lot to do with it in

1 wintertime where we're concerned with runoff from  
2 snow or ice-covered --

3 BY MS. WILLIAMS:

4 Q. I do want to come back to (c)(5) and the  
5 setbacks, but let's finish this topic first. Do you  
6 believe that a field's erosion factor, which we're  
7 talking about the calculation using RUSLE 2 that  
8 would come up with a "T" now, do you believe that  
9 calculation, that procedure effects the amount of  
10 runoff during winter application?

11 A. Only to some degree, because it's  
12 really -- if you look at RUSLE 2, it includes a lot  
13 of factors about the soil itself, that is the  
14 texture of the soil, erodibility and so on, and here  
15 we're not talking about -- we're talking about  
16 surface runoff where the soil is not being effected  
17 at all.

18 But the other parts of RUSLE 2 that do  
19 pertain are the management practices, that is  
20 whether it's being farmed on a contour, of course  
21 the slope, the length of slope, and so on.

22 So, I guess my objection is to be too  
23 prescriptive using RUSLE 2 for that particular  
24 situation and also the soil test for that particular



1 situation has an impact on the decision of whether  
2 or not to use that area as a land application area.

3 Q. So, do you think the level of phosphorus  
4 in the soil has any impact on the amount of  
5 phosphorus that would reach surface waters during  
6 winter application?

7 A. If the level of phosphorus concentration  
8 in the soil -- the consideration is the attached  
9 phosphorus leaving the site with erosion is what is  
10 of concern. And so if the winter application --  
11 which if we're talking about frozen, ice-covered,  
12 snow-covered soil, the decision is being made on  
13 whether the manure can leave the surface, the  
14 nutrients can leave the surface and not necessarily  
15 take soil with it, so that is my concern with that  
16 particular prescriptive language.

17 HEARING OFFICER: Ms. Williams, while  
18 you're pondering for a moment, we have been at it  
19 for about 90 minutes. And I hate to cut you off  
20 abruptly. It seems like a likely point to take a  
21 break for 15 minutes to check phones and drinking  
22 fountains.

23 Let's plan to go off the record and resume  
24 at quarter to 12:00, go for a bit more time and see

1 where we stand in terms of a lunch break. And we  
2 will resume right away with you, Ms. Williams, the  
3 questions that you had planned to turn to. Thanks.

4 11:30 a.m. (At this point in the  
5 proceedings, a short recess was taken.)

6 11:50 a.m.

7 HEARING OFFICER: Thank you, everyone, for  
8 returning promptly. We do have people wishing to  
9 offer comments who would like to do so at this point  
10 in our proceeding.

11 And in speaking off the record about  
12 procedures with the chief participants, the  
13 Agricultural Coalition, the Agency and the  
14 Environmental Groups, it was readily acceptable to  
15 all of them that we do so.

16 So, without any further delay, I want to  
17 begin with the first of the commenters who signed  
18 in. Mr. Hausman, if you would step forward to the  
19 microphone, please, and begin your comment, we would  
20 appreciate it. Thank you.

21 MR. HAUSMAN: Good afternoon or morning.  
22 My name is Chris Hausman and I am a farmer from  
23 Pesotum, Illinois, which is just right south of here  
24 in Champaign County. I want to thank the members of

1 the Pollution Control Board and the Hearing Officer  
2 for allowing me to speak today.

3 My family and I operate a cash grain farm.  
4 We farm approximately 1,500 acres in Southern  
5 Champaign County, corn, soybeans. I am a  
6 fourth-generation farmer. Hopefully, one of our  
7 three sons will be a fifth-generation farmer.

8 I also serve on the Board of Directors of  
9 the Illinois Farm Bureau. I have served in that  
10 capacity for six years now. And the Illinois Farm  
11 Bureau is the leading or the largest farm  
12 organization in Illinois, and I would point out that  
13 the mission of the Illinois Farm Bureau is to  
14 improve the economic well-being of agriculture and  
15 to enrich the quality of farm family life.

16 I also serve on the Illini FS Operating  
17 Board here in Champaign, which is a member-owned  
18 cooperative that supplies fuel, feed, herbicides,  
19 supplies to the farming community.

20 As a grain farmer, the proposed rules for  
21 CAFOs is very important to me. Livestock production  
22 is the single largest consumer of grain. Livestock  
23 is essentially my biggest customer. Because of this  
24 fact, a strong and profitable livestock industry is

1 important for my ability to earn a living.

2 The livestock industry is also very  
3 important for others to earn a living as well.  
4 Livestock farmers in Illinois need feed,  
5 veterinarian services and other supplies for their  
6 farms. Milk and livestock need to be processed into  
7 food products for consumers. These activities start  
8 with livestock farms, but end up resulting in over  
9 \$27 billion of economic activity for our state.

10 On my farm, responsible environmental  
11 management is very important. For instance, I have  
12 installed filter strips next to drainage ditches.  
13 I'm also a certified private applicator, which  
14 allows me to apply restricted-use pesticides on my  
15 farm. I also incorporate and integrate pest  
16 management practices, which basically directs me to  
17 only apply what is needed, when it's needed.

18 And, lastly, I utilize variable-rate  
19 technology with yield maps, which will provide me  
20 prescriptive fertilizer application. So, as a  
21 farmer, I feel that I really try to be the best  
22 steward that I can be.

23 Livestock farmers are also responsible  
24 management -- or use responsible management

1 practices on their farms as well. We understand  
2 that we must manage our farms in a sustainable  
3 fashion so future generations can continue to  
4 produce food.

5 We also want to protect our resources  
6 because we drink the water and breathe the air on  
7 our farms. We want to protect the air and water for  
8 our families and for our communities.

9 We also need to produce food in a  
10 sustainable way. Livestock production helps us do  
11 that. Manure from animals is used as fertilizer for  
12 crops and these crops are grown then to feed the  
13 animals and then animals make more manure and the  
14 cycle starts all over again.

15 This isn't anything new. My great  
16 grandfather, who founded/settled where I farm today,  
17 in my opinion was a sustainable farmer back then and  
18 set the groundwork. If he wasn't sustainable, we  
19 wouldn't be here today. And he's -- to me, the  
20 green revolution really started back then. So, he  
21 set the path and we continue down that path of  
22 important stewardship for the environment.

23 The proposed CAFO rule must be reasonable  
24 and manageable for livestock farmers. One way that

1 the rule -- or one way for the rule to be reasonable  
2 is to assure consistency with other regulations.

3 The proposed rules that you are  
4 considering should mirror the federal CAFO rules so  
5 that farmers have clarity on the regulations that  
6 they face. The proposed rules should also align  
7 with the Livestock Management Facilities Act. The  
8 result will be a rule that is clear and doesn't  
9 unnecessarily duplicate regulations farmers face.

10 Developing reasonable regulations will  
11 allow livestock farmers to continue in an important  
12 economic engine for agriculture in the state's  
13 economy. It will allow grain farmers, like myself;  
14 livestock farmers; and those that support us to  
15 continue to be successful. It will allow the  
16 agricultural economy to continue to thrive in  
17 Illinois. I want to again thank you for the  
18 opportunity to speak.

19 HEARING OFFICER: Mr. Hausman, thank you  
20 for your comment, which is of course part of our  
21 record here today. And we are ready now for  
22 Mr. Hays to step forward and offer his comment.  
23 Mr. Hays, if you would identify any group that you  
24 are part of or representing today, please.

1 MR. HAYS: Sure. All right. Good  
2 morning. I would just like to thank you for this  
3 opportunity to take comments from folks like us. We  
4 certainly appreciate it.

5 My name is Scott Hays. I'm a resident of  
6 rural Champaign County. I live on the -- on three  
7 acres on the Sangamon River just north of Mahomet,  
8 between Mahomet and Fisher, and I'm also the  
9 President of the Upper Sangamon River Conservancy,  
10 although my comments today have not necessarily been  
11 vetted by the group, but I certainly speak on behalf  
12 of what the group would agree with.

13 The Upper Sangamon River Conservancy's  
14 mission is the promotion, education, stewardship and  
15 recreation on the Sangamon River as it runs through  
16 Champaign County. That is our area.

17 And I guess I'm here today just to say  
18 that, you know, I respect the livestock operations  
19 and the farming operations, but I'm here because I  
20 speak for the river. And I am -- I use the river  
21 recreationally; I'm kayaking on the river; my family  
22 and I swim in the river and the group that we have  
23 has canoes and people and friends that are  
24 constantly in the river.

1 I'm also proud to say that the  
2 Sangamon River, we also monitor the water quality on  
3 the Sangamon River, our group, through citizen  
4 scientist programs where we look at mussels and  
5 invertebrates. And so far, the indications from  
6 those surveys suggest that the Sangamon River is  
7 either in very good or excellent condition. So, the  
8 river is a very good-quality river. That's less  
9 true of the tributaries, but we won't talk about  
10 that yet.

11 My concern here and my reason, you know,  
12 for being here today is only to reiterate the idea  
13 that this rule should be the strongest rule possible  
14 that protects water quality. And I've heard some of  
15 the testimony here. I think water quality is  
16 essential and I think we're all kind of in  
17 widespread agreement there.

18 I do know from direct experience -- I live  
19 down river from a CAFO, a CAFO that sits atop a  
20 ridge that feeds into three water systems, into  
21 Lone Tree Creek, Madden Creek and Salt Creek, and  
22 all these tributaries go into the Sangamon River.

23 I also know that back in Labor Day of  
24 2010, there was a fish kill on Lone Tree Creek where



1 40,000 fish were killed. It had nothing to do with  
2 this CAFO, or at least that's still being discussed,  
3 so nothing here. There was a farmer there that  
4 left -- I guess some soybeans had rotted and that's  
5 apparently what caused this, again according to the  
6 Pollution Control Board. But 40,000 fish were  
7 killed.

8 There's also been other accidents, in 2001  
9 where two million gallons was dumped into a pond,  
10 killing thousands of fish; in 2009, an Eastern  
11 Illinois hog farm dumped waste into a creek that  
12 killed 110,000 fish.

13 So, you know, accidents happen and there's  
14 really no blame, but I think in the rule-making  
15 process, the rule needs to be strong enough to  
16 assure that accidents don't happen.

17 I mean, the consistent application -- I'm  
18 not an agricultural expert and not qualified to  
19 speak on that, but I do know that these accidents  
20 occur and this is what we should all, on all sides  
21 of this issue, be concerned about. And it's  
22 certainly what I'm concerned about as my family and  
23 my group get people on this river.

24 So, I don't think I have a lot more that I

1 need to say at this point, only that I support this  
2 effort, support the group making the strongest rule  
3 possible. But I would like to leave you with a  
4 comment from Wendell Berry, the environmental  
5 philosopher, and this quote from Wendell Berry I've  
6 always liked. "Do unto those downstream what you  
7 would have those upstream do unto you." Thank you.

8 HEARING OFFICER: Mr. Hays, thank you for  
9 your comment. And, Mr. Ponton, we are set for you.  
10 If you would also -- if you represent any group or  
11 organization, identify that for me.

12 MR. PONTON: Okay. I would like to thank  
13 everybody for allowing me to come here today and to  
14 speak my piece.

15 My name is Leland Ponton and I'm a  
16 resident and retired farmer of approximately  
17 140 acres on Section 24 and 25. I live in the woods  
18 on Section 24 of this property, which the Big Beaver  
19 Creek runs through. It's located three miles and a  
20 half west of Papineau.

21 I'm here today to respond to -- I'm here  
22 today to represent the landowners along the Big  
23 Beaver Creek. In the 70s, I was the Civil Offense  
24 Captain for Iroquois County and Papineau Township.

1 I would like to start the Beaver Creek Water and  
2 Wildlife Monitoring Group. I don't know, I'll have  
3 to see about this. But, again, like the man just  
4 said, it's necessary. It's very necessary in the  
5 remote areas, such as I am, and these other people.

6 It will consist of eight to twelve people  
7 living along the Big Beaver Creek. Each man will  
8 have a one-mile area to watch over. He can use the  
9 licensed hunters and fishermen that come on his  
10 property for his eyes when he cannot be there.

11 Photographs taken by cell phone and license plate  
12 numbers will be used as evidence for the intrusion.

13 I have talked to Carl Ludavich (phonetic).  
14 I don't know if I'm pronouncing that right. He's  
15 Watseka's ESD Coordinator. And he also agrees that  
16 we need to start a monitoring group.

17 I have also brought copies of the Watseka  
18 Times Republic, which you have on display, I hear,  
19 in regards to July 31st when we had this manure --  
20 this liquid manure that was -- that got into the  
21 water from a stream about ten miles.

22 Now, the way I understand, because I don't  
23 want to be one to point fingers, the EPA has pointed  
24 out that its place of origin was a farm, a little

1 farm near the county ditch -- the county dredge  
2 ditch east of St. Anne, Illinois. This ditch then  
3 drains into the Big Beaver Creek. And due to  
4 leakage in the liquid manure line, its contents ran  
5 through onto the ground, then into the nearby ditch  
6 and it continued onward by draining into the  
7 Big Beaver and later on into the Iroquois River.

8 My questions are why wasn't there a man in  
9 charge of this equipment and why didn't it -- why  
10 did it take them two days to notice what had  
11 happened? Last but not least, was it because of the  
12 cutting back on help, leaving no one to monitor the  
13 machines? I don't know these answers. But because  
14 of this neglectful act, they contaminated ten acres  
15 of -- ten miles of water and it was a threat to the  
16 property owners by possibly their wells and also it  
17 put hundreds of wild and domesticated animals at  
18 risk if they were forced to drink this water, and  
19 not mentioning the 68,000 fish that it killed.

20 We, the people of the Big Beaver Creek  
21 area, feel that this is an important matter and that  
22 the people who created this disaster should have to  
23 pay for their neglectful action. Thank you very  
24 much.

1 HEARING OFFICER: Mr. Ponton, thank you  
2 for your comment. And we are ready now for  
3 Mr. Culkin to follow you.

4 MR. CULKIN: Here's some maps, if you  
5 would like one to look at, if you care to. Good  
6 afternoon. I'm Joe Culkin, Kane and Kankakee  
7 County.

8 We have an operation that has just gotten  
9 started within the last few years. It is a calf  
10 operation, which is very important to the economy  
11 itself because a lot of the young calves produced  
12 there end up being -- I don't know the exact correct  
13 word for it -- but they are -- they take the genes  
14 off of them and they transpose them and that's what  
15 they do.

16 What they have done is they put this right  
17 on the bank basically of the Kankakee River, or  
18 actually the Iroquois River, which flows into the  
19 Kankakee River, which is just upstream from  
20 approximately seven villages and cities that use the  
21 water out of those rivers.

22 It's very important, I think, to stop some  
23 of the manure qualities from getting into the water  
24 and I just feel like that this is something that

1 should be looked into and considered and something  
2 done with. Thank you.

3 HEARING OFFICER: Thank you, Mr. Culkin,  
4 for your comment. Again, if I can verify that  
5 Ms. Main did leave and is no longer available. We  
6 will move on then to Ms. Ward. It is your turn. If  
7 you would also identify any group or organization  
8 you represent, please.

9 MS. WARD: Thank you for allowing me to be  
10 here. My name is Diane Ward. I live in Schuyler  
11 County, Illinois in the western part of the state in  
12 the Illinois River Valley. My husband and I own a  
13 small farm there.

14 We live very close to Sugar Creek and a  
15 lot of our property is very heavily wooded and  
16 hilly. It's actually quite beautiful. It still has  
17 a lot of heavy timber. It's been a beautiful fall  
18 actually.

19 I'm here today to urge the Board to adopt  
20 more stringent regulations for all large CAFOs.  
21 Hilltop View, a professional swine management CAFO  
22 housing several thousand hogs, became our neighbor  
23 six years ago. Our lives have not been the same  
24 since.

1           The facility has impacted us beyond what  
2 we could have imagined. Besides the obvious  
3 difficulties we've had with odor, flies, etc. that  
4 we have to think about every time we go outside or  
5 before we consider opening a window, the facility's  
6 impact in streams running through our land is a huge  
7 concern to us, as well as our ponds. We've been  
8 very concerned about how the facility is impacting  
9 our water.

10           The problems with this facility began even  
11 before it was constructed. I personally went to  
12 Senator John Sullivan and Representative Jil Tracy  
13 and discussed with them my concerns before it was  
14 constructed. It did not have a waste management  
15 plan and was not required to have one until six  
16 months after it went into operation. I was told the  
17 facility was working on it. Basically they had no  
18 plan. The first hogs were put in before it even  
19 became operational.

20           This facility even failed to obtain the  
21 required NPDES storm water construction permit when  
22 it was being built. The IEPA was notified and the  
23 attorney general's office eventually brought fees in  
24 accordance with the Pollution Control Board against

1 them for this, along with complaints against a  
2 number of their other facilities in the area that  
3 had water pollution problems.

4 After the NPDES storm water construction  
5 violations, the facility was charged with  
6 discharging livestock waste from one of its land  
7 application units.

8 The facility is built uphill from  
9 Sugar Creek, close enough to Sugar Creek that I have  
10 seen them pumping water from Sugar Creek to the  
11 facility. I have seen rainwater running directly  
12 downhill from this operation, down the road directly  
13 into the creek.

14 Considering the close proximity, the  
15 rainwater can't help but carry runoff from the  
16 facility into the creek, which flows into the  
17 Illinois River.

18 As a neighbor, I am impacted by the  
19 spreading of waste on fields as close as 700 feet  
20 away. They do a great deal of their spreading at  
21 nights and on weekends and holidays, making it very  
22 difficult to contact the Illinois EPA to report  
23 questionable land application practices and  
24 suspected discharges until after the fact.



1 I have seen manure from this facility  
2 being applied to another area farmer's fields  
3 running into road ditches that also lead to the  
4 creek. Some of the other things I have witnessed  
5 are dead, bloated pigs being stored right outside  
6 the production area building where rainfall runoff  
7 moves downhill to the creek, the application of  
8 waste on snow on a field 200 acres in size being  
9 applied in late December.

10 I have seen manure applied in winter more  
11 than once. This is not an uncommon situation. And  
12 this manure looked like it was running off because  
13 of the snow melt and running into drainage that  
14 reached the creek. All of these practices lead to  
15 water pollution and should be prevented.

16 The owners of these large CAFOs don't seem  
17 to care because they don't have to care. They are  
18 barely held accountable and we, the neighbors, are  
19 left to deal with their mess. We actually feel like  
20 we've had to do the job of the IEPA by worrying  
21 about the water, doing our own water testing and  
22 other things that we should be able to depend on  
23 them to do.

24 The current regulatory system in Illinois

1 for CAFOs is flawed. These facilities should be  
2 regulated like other industrial facilities. They  
3 are not farms. People should have the right to know  
4 how they intend to manage their waste and the  
5 Illinois EPA should regulate them and hold them all  
6 to the same standards, regardless of whether or not  
7 they've been caught polluting.

8 Most of the pollution from these  
9 facilities goes unnoticed by the IEPA. As it stands  
10 now, once they are built, no one regulates them  
11 until after they pollute. Then they may be required  
12 to have a permit, but maybe not. This does little  
13 to protect our most precious resource, our water.

14 I urge the Board to enact strong  
15 regulations that, once and for all, hold all large  
16 CAFOs to the same standards. Thank you and I  
17 appreciate this opportunity.

18 HEARING OFFICER: Ms. Ward, thank you for  
19 your time. Mr. Smith, our last commenter, we're  
20 prepared for you at this point.

21 MR. SMITH: Thank you for the opportunity  
22 to speak. I do not represent anybody but myself. I  
23 live near the town of Homer, along the Salt Fork  
24 River, which is downstream from this facility right

1 here. If any of you were to flush the stool today,  
2 it would go right through there, I think.

3 The farm was started in 1828 by my great  
4 great grandfather and I'm the fifth generation. My  
5 son is the sixth. My son mostly is the farmer. We  
6 have about 1,400 acres of our own land and then we  
7 have additional land.

8 I used to feed about 1,200 to 1,500 cattle  
9 and manure disposal became quite a problem. We did  
10 find that we were getting a phosphorus buildup in  
11 the soil, too high, had to change that. Then, we  
12 had to store some manure, but I did haul most of it  
13 in the wintertime because the ground was frozen.  
14 It's flat land. I think I'm going to have to change  
15 that.

16 Now, this thing about incorporating this  
17 manure, a moldboard plow will do it best. A chisel  
18 plow can do it fairly well, dependent on how it  
19 works and the type. A disc will not do it very well  
20 at all. It still stinks afterwards.

21 Now, the size of our operation now is  
22 basically dependent on trash feeding we get from  
23 seed corn companies. They always have something  
24 that's not sellable. And this year, because of

1 apitoxin, we can't sell it, but we can feed it to  
2 cattle, so that's where our feed comes from.

3 Okay. I'm still a registered livestock  
4 producer, whatever. I think that's every three  
5 years, right? Yeah, I have to go to Bloomington or  
6 something in a snowstorm and listen to somebody.  
7 Then, I get to go home.

8 Frozen ground, sometimes the ground is  
9 very dry and it's very porous and manure will soak  
10 in very well. Sometimes the ground is very wet,  
11 it's mostly solid and it doesn't. But we hauled it  
12 anyway in the wintertime regardless and at least we  
13 got rid of it.

14 Oh, if you wait until the ground is thawed  
15 out, ice and snow, it's usually soft. When you  
16 spread manure in the spring, the soil gets compacted  
17 and then the water won't run in and the manure will  
18 run off, but I haven't heard that problem yet, okay?

19 Well, really I think that's all I can  
20 think of right now. But do remember when you flush  
21 the stool, it goes down to my house, right by it.  
22 That's all. Thank you.

23 HEARING OFFICER: Mr. Smith, thank you  
24 very much for your comment and it, too, is part of

1 our record here today.

2 And, Ms. Williams, I think we are prepared  
3 to resume with the questions that you had for  
4 Dr. Funk. And, Dr. Funk, if we could end your break  
5 back in a comfortable chair and ask you to come  
6 forward, we will be able to resume.

7 (Pause.)

8 HEARING OFFICER: Dr. Funk, are you set?

9 DR. FUNK: I am.

10 HEARING OFFICER: Very good.

11 Ms. Williams, whenever you're ready, we can go back  
12 to your questions that you were kind enough to let  
13 me interrupt for a break and comment.

14 EXAMINATION

15 BY MS. WILLIAMS:

16 Q. I just have a couple more questions  
17 dealing with the issue of winter application and  
18 then we can move on.

19 We had been discussing the recommendation  
20 from your testimony that Section 502.630(c)(5) be  
21 eliminated. In that section, I believe, Dr. Funk,  
22 what you're discussing is the multiplication of  
23 setbacks, correct?

24 A. Yes.

1 Q. And that provision states that three times  
2 the otherwise applicable setbacks would be in place?

3 A. Yeah, based solely on slope.

4 Q. Based solely on slope? And just for the  
5 record, that provision applies if the slope is  
6 between two percent and five percent?

7 A. Yes.

8 Q. Okay. I have heard you also, though,  
9 testify that slope and distance to water are the two  
10 most significant factors that effect whether manure  
11 applied in the winter will reach surface waters; is  
12 that correct?

13 A. Yes, that's correct. And I guess my  
14 objection here is that the measurement of the slope  
15 in the field is not very often constant, that is  
16 you're going to have some areas of the field with  
17 steeper slopes and others pretty level.

18 And so I guess my objection is to just put  
19 a blanket provision on -- or a multiplication of  
20 that setback, I think that's being overly  
21 prescriptive, if I can use that word, and not  
22 necessarily helpful.

23 Again, going back to the field-by-field  
24 assessment and being able to point out for each

1 field what are the areas that could be problems and  
2 ought to be avoided, those can be done I think  
3 better on a field-by-field basis rather than to use  
4 the blanket recommendation of a distance measurement  
5 and multiply that based on the slope.

6 Q. Do you have a suggestion for how the Board  
7 could incorporate your concept into a regulation?

8 A. Well, again, I think that goes back to the  
9 nutrient transport factors that are already being  
10 considered and have certainly been addressed in the  
11 CNMP process where you're taking into account not  
12 just the RUSLE 2 but also the field-specific factors  
13 that a producer and a consultant would go over and  
14 be able to, yes, map out the field and say, "Here  
15 are some areas that need to be avoided," but not  
16 just on the basis of a blanket measurement from  
17 the -- from surface water or from conduit. Do you  
18 see where I'm going with that?

19 Q. Okay. Let me try and see if -- maybe I  
20 will try to -- I think then the answer is no, I  
21 guess. Is that where you were going? You don't  
22 have a recommendation for a way the Board could  
23 replace this albeit potentially imperfect way of  
24 addressing fields with slope and proximity to

1 surface waters that may make them problematic for  
2 winter application?

3 A. Well, I do actually.

4 Q. Beyond --

5 A. Beyond recognizing the value of the CNMP  
6 and the field-by-field assessment that goes on  
7 through that process, recognizing the CNMP.

8 MR. RAO: May I ask a follow-up question?  
9 One of the limitations the Agency has proposed is  
10 that for slopes greater than five percent, you know,  
11 basically winter application is prohibited.

12 So, since that limitation is there, would  
13 it be -- would it make it a little bit more simpler  
14 if we take slope out of the equation in  
15 Subsection (c)(5) and just use the setbacks that the  
16 Agency has proposed?

17 DR. FUNK: In a sense it would be easier,  
18 yes, to just put in the setbacks and not have to  
19 coordinate with the slopes, but you're saying the  
20 use of the multiplication of the slopes --

21 MR. RAO: Yes.

22 DR. FUNK: -- in anything but essentially  
23 flat ground?

24 MR. RAO: It can be -- it can be -- a



1 slope can be between zero and five percent. If it's  
2 more than five percent, then you cannot apply.

3 DR. FUNK: Again, I think it would be more  
4 helpful to a producer and more realistic for where  
5 manure could be applied and what runoff risk there  
6 might be if you go over, you know -- if you take  
7 just a field-by-field assessment. You need to look  
8 at the slope not on a field average but on the  
9 individual areas because many times you will have  
10 different soil types within that one field; you will  
11 have different slopes; you will have different  
12 distances to the surface water or the conduits.  
13 It's just difficult to put a flat number, whether it  
14 be a setback or a slope. I'm just not sure how  
15 helpful it is.

16 MR. RAO: So, are you suggesting that some  
17 elements of the CNMP be incorporated in the rules?  
18 Right now the rules don't require an operator to go  
19 through that process.

20 DR. FUNK: Well, but the rules do  
21 recognize the value of the CNMP; they recognize the  
22 process that the CNMP goes through to do the  
23 field-by-field assessments. And certainly that's  
24 been the intention of the federal rule, to recognize

1 the CNMP process, the Comprehensive Nutrient  
2 Management Plan, as the basis for nutrient  
3 management planning.

4 EXAMINATION

5 BY MS. WILLIAMS:

6 Q. Can I just clarify maybe for the record --

7 A. Yes.

8 Q. -- briefly, when you say the rules do  
9 recognize the CNMP field assessment, we're talking  
10 about Section 502.613, or am I misunderstanding you?

11 A. I'm -- well, I guess I'm referring -- I'm  
12 going back to the direction from the federal  
13 regulation in that they recognize the thoroughness  
14 of the CNMP process as being something that should  
15 be recognized by the states as adequate for the  
16 field assessment.

17 Q. The federal CAFO rule says that?

18 A. As I understand it, at least in the  
19 preamble of the federal CAFO rule, they urge the  
20 states to recognize the CNMP process as being the --  
21 if not absolutely essential, as being certainly the  
22 basis for the land application area assessment. I'm  
23 getting some blank looks out there.

24 EXAMINATION

1 BY MS. KNOWLES:

2 Q. May I? This is Kim Knowles,  
3 K-n-o-w-l-e-s. I don't believe the question has  
4 been answered then. The question I believe the  
5 Board asked is are you advocating that the CNMP  
6 process be incorporated into IEPA's proposal?

7 A. Well, we're still faced with the problem  
8 of recognizing the three different plans. We've  
9 still got the LMFA plan and we've got the CNMP  
10 process, which is more or less voluntary but it is a  
11 rigorous process, and then we've got the NPDES  
12 permit.

13 So, it's not -- I don't -- I don't know  
14 how to -- how you want to address that. I think  
15 that -- I would hope that the Board would recognize  
16 the CNMP process, but how to incorporate that in the  
17 language or whether then to force the CNMP  
18 development as a replacement for the LMFA I think  
19 also would be overreaching.

20 Q. But I understood your testimony to say  
21 that the CNMP process adequately addresses what  
22 we're -- the two key problems we're trying to  
23 address here, which is phosphorus and winter  
24 application, so --

1           A.     In a perfect world, that would be -- if  
2     everybody went through the CNMP process, I think  
3     that should be recognized as a good solution. I'm  
4     beating around the bush, aren't I?

5                   MS. KNOWLES: (Nods.)

6                   MR. RAO: We are trying to see if there's  
7     an alternate that you could recommend that could be  
8     incorporated in the rules since you are saying that  
9     this is too prescriptive, what we have under (c)(5).

10                  MS. KNOWLES: And it sounds like you're --  
11     my issue is it sounds like you are putting forth  
12     this CNMP process as sufficient, when in reality  
13     it's a process that is completely voluntary and only  
14     applies to those who are applying for certain  
15     federal programs. That's the problem.

16                  MS. WILLIAMS: And I did not expect you to  
17     solve the problems for us.

18                  MS. MANNING: May I have a follow-up  
19     question?

20                  HEARING OFFICER: Yes, ma'am.

21                                   EXAMINATION

22     BY MS. MANNING:

23                   Q.     If I could have a follow-up question,  
24     Dr. Funk, as well. I hear you saying -- correct me

1 if I'm wrong -- that from an environmental  
2 perspective, based on your knowledge and expertise  
3 of, what, 35 years doing what you do -- and in your  
4 résumé I think you -- how many farmers have you  
5 trained in terms of waste management plans -- that  
6 you find the CNMP process to be a good process and  
7 an adequate process and as adequate as the process  
8 being proposed in the EPA rule to the Board. Is  
9 that what I hear you say?

10 A. Yes, I think that's true. And so my  
11 concern again is when we put numbers, prescriptive  
12 numbers about setbacks and so on, what we're doing  
13 is we're taking credit away from those consultants  
14 who are on the ground, who are out there at the  
15 field and able to make individual assessments at the  
16 site and take into account all the factors besides  
17 just the setbacks and the slope.

18 Q. So, for a producer who has gone through  
19 the CNMP process -- and, you know, it's been my  
20 experience at least -- correct me if I'm wrong --  
21 that there are quite a few people going through the  
22 process in terms of NRCS cost-sharing --

23 A. Yes.

24 Q. -- arrangements. And for those that have

1 gone through that process and have that plan on  
2 their particular facility, would you then agree or  
3 advocate that there would be no reason to go through  
4 these other prescriptive kinds of nutrient  
5 management processes proposed in these rules if they  
6 already have that CNMP process through the NRCS  
7 process?

8 A. I think so, yes, because like I say, it  
9 recognizes not only the land treatment and the field  
10 application, but it recognizes the manure  
11 production, the facility's aspects and even the  
12 proposed changes to the facility and to land  
13 application areas should the producer recognize some  
14 critical areas that need to be improved.

15 Q. And would you agree that the CNMP process  
16 that you work with through NRCS, the goal really is  
17 the same in terms of the process, and that is to  
18 prevent a discharge to the waters of the  
19 United States?

20 A. Absolutely, yes.

21 Q. And so would you agree as well that  
22 anybody that goes -- even permitted CAFOs that go  
23 through the CNMP process -- that that process ought  
24 to be sufficient to prevent a discharge under any

1 scheme if they've gone through the CNMP process  
2 that's prescribed by NRCS?

3 MS. WILLIAMS: Can you clarify your  
4 question, Claire, if you're talking about from land  
5 application?

6 MS. MANNING: Yes.

7 MS. WILLIAMS: When you say prevent a  
8 discharge, I want to make sure we're not talking  
9 about infusing --

10 DR. FUNK: But here's the other part of  
11 that question, getting to your follow-up question,  
12 and that is with the CNMP process, there's better  
13 recognition of the need for adequate storage to get  
14 us through the winter storage period when we're not  
15 able to get out, so I think they can -- altogether,  
16 the CNMP process, it looks at both manure production  
17 storage and also the land application area as a good  
18 package that will get us through these same kinds of  
19 questions that we have about the manure application  
20 and the phosphorus.

21 MS. WILLIAMS: But you wouldn't want that  
22 to be required for all large CAFOs, correct?

23 DR. FUNK: Again, we run into that same  
24 issue with the existing LMFA plan that's been in

1 place for quite a while and, naturally, the CNMP  
2 which even has modifications, as we've just recently  
3 seen some modifications of the CNMP.

4 So, in some ways it's kind of a moving  
5 target and I think we need to recognize the progress  
6 that has been made by the livestock community over  
7 the last couple of decades with manure management  
8 planning.

9 MR. RAO: You know, having gone through  
10 the CNMP process, do you think what the Agency has  
11 proposed would be -- could afford some safeguards  
12 for winter application?

13 DR. FUNK: Yes, certainly, because the  
14 Agency is proposing to make sure that the storage is  
15 adequate and that the protection from runoff, of  
16 keeping clean water clean so that you don't lose  
17 storage by polluting precipitation, and then looking  
18 at the land application area and the various methods  
19 to make sure that, you know --

20 MR. RAO: Including setbacks?

21 DR. FUNK: Yeah. But back to the setback  
22 requirements again, you know, as I say, there's  
23 perhaps more numbers to those, more prescription  
24 than I would like to see. I would rather see it



1 done on a field-by-field basis with somebody  
2 actually on the ground rather than going out just  
3 with a tape measure and always have a setback that's  
4 the same no matter what the situation.

5 MS. BURKE: Tim, can I?

6 HEARING OFFICER: Please.

7 MS. BURKE: For the CNMP plans, if a  
8 facility has opted to go through that process, will  
9 it necessarily meet the requirements of the LMFA  
10 plan?

11 DR. FUNK: I think in almost every case,  
12 the CNMP plan will adequately cover the LMFA, yes,  
13 uh-huh.

14 MS. BURKE: And in your experience, for  
15 those facilities that are required to do an LMFA  
16 plan but have opted to do the CNMP plan, what  
17 percentage, you know, opt to do that?

18 DR. FUNK: I don't have that number.

19 MS. BURKE: Okay.

20 DR. FUNK: I would also point out that  
21 since NRCS, Illinois NRCS, when they write the CNMP,  
22 they have to recognize the state regulations, so  
23 they have to be sure that the LMFA is covered.

24 MR. RAO: Do you have any idea as to how

1 many of these plans by your office allow for  
2 farmers --

3 DR. FUNK: Well, our office doesn't  
4 develop the plans. These are done by individuals,  
5 by consultants.

6 MR. RAO: Do you help these individuals in  
7 these plans?

8 DR. FUNK: We have helped to provide  
9 input, but we don't do the actual -- you have to  
10 realize that the development of the plan is a rather  
11 involved process that starts with the producer, the  
12 livestock producer himself, gathering -- the  
13 consultant has to get a lot of data on the facility,  
14 on the land application area, and so we don't have  
15 the capacity to do that nor would we want to take  
16 work away from the private industry.

17 MR. RAO: So, who would have some  
18 information about the specifics of, you know, the  
19 number of CNMPs that are being done in the state?

20 DR. FUNK: NRCS would have those numbers,  
21 but that would be the only source of those that have  
22 been written, although in some cases -- well,  
23 certainly the permits, there have been permits that  
24 have been issued that have CNMP as the basis.

1 MR. RAO: Thank you.

2 MS. WILLIAMS: So, just to wrap up this  
3 exact point, there are facilities in Illinois that  
4 have submitted CNMP plans developed pursuant to NRCS  
5 to the Agency as part of the permitting process; is  
6 that correct?

7 DR. FUNK: That is correct.

8 MS. WILLIAMS: If no one has follow-up, I  
9 was going to switch off of winter.

10 MS. DEXTER: I just have one more question  
11 about winter application that's a follow-up from an  
12 earlier statement.

13 EXAMINATION

14 BY MS. DEXTER:

15 Q. You said that winter application -- you  
16 think that winter application is uncommon in  
17 Illinois and I'm wondering, what's the basis for  
18 that statement? Do you do any monitoring of  
19 activities in winter or --

20 A. No, I don't do monitoring. I do visit  
21 occasionally with our -- well, rather regularly --  
22 with our commercial manure applicators who do a  
23 large volume of the CAFO manure system pumping and  
24 they have assured me that it's pretty seldom that

1 they're out there in the wintertime; it's unusual.

2 They try to -- they have the capacity to  
3 move manure in a hurry and are able to get it done  
4 in a fairly narrow window in the fall between the  
5 time when the crops come off and when the field  
6 conditions become unsuitable for applying manure and  
7 then, of course, in the spring again they will have  
8 some activity before the crop goes in.

9 Q. Did they attempt to quantify what they  
10 meant by seldom, or did you ask them any questions  
11 about what that -- what that might mean?

12 A. No.

13 Q. Are there applicators that aren't in that  
14 group that you meet with regularly?

15 A. We have -- we actually have asked for --  
16 we have gone to a list of commercial applicators now  
17 on our website, which you can get to so you can see  
18 who is out there and doing the commercial  
19 application, and I think they're doing a large  
20 proportion of the bigger livestock facilities, at  
21 least insofar as the liquid manure application.  
22 It's gotten to the point where the commercial  
23 applicators have -- there's a real advantage to  
24 using commercial applicators for hauling and

1 spreading liquid manure.

2 Q. But not everybody does that, right?

3 A. Not everybody does it. A lot of people  
4 still have their own tankers, uh-huh.

5 MS. DEXTER: All right. Thank you.

6 EXAMINATION

7 BY MS. WILLIAMS:

8 Q. Dr. Funk, just one follow-up that she  
9 reminded me about. You testified about the large --  
10 the practices of the large facilities.

11 Can you just explain to the Board if  
12 that's a little bit different for smaller  
13 facilities? For example, our last commenter, I  
14 think, talked a little bit about potential  
15 advantages for a small, unsophisticated facility.  
16 Can you discuss that a little bit?

17 A. Yeah, and that is an interesting case  
18 because with the smaller facilities, many times they  
19 do have to -- they've got limited employees, limited  
20 labor in order to -- available to spread manure;  
21 they may not have invested in the larger equipment  
22 so that you can do it in a narrower time window.

23 And I can remember growing up on our own  
24 dairy farm, you know, we used to spread manure

1 whenever you get the chance and, yes, we used to  
2 spread -- this has been several years ago -- but,  
3 yes, we used to spread in the wintertime because the  
4 ground was solid and you could get out there, but we  
5 didn't travel very far from the barn.

6 And as you can imagine, the phosphorus  
7 tests kept increasing and that's something -- we've  
8 certainly seen some improvement in that situation  
9 with our larger facilities. But in the smaller  
10 facilities that have usually less labor, they have  
11 to spread more frequently with smaller equipment and  
12 smaller land parcels and so they do have a different  
13 set of challenges than the larger facilities.

14 We still though -- I would remind you that  
15 in our livestock -- certified livestock manager  
16 training, the state requires that facilities that  
17 are managing from 300 animal units on up attend that  
18 training, so it's not just the large CAFOS; it's  
19 what we call the medium also.

20 We've seen an increase in the number of  
21 those size facilities who have been represented in  
22 our training and so we talk about winter application  
23 and what the risks are and those kinds of things and  
24 I think we are having a substantial impact in

1 improving those land application practices.

2 EXAMINATION

3 BY MS. MANNING:

4 Q. I have one question. At the risk of  
5 bringing us all the way back full circle to the  
6 first question we asked right in the middle of this  
7 winter application issue, if you could comment based  
8 on your experience with Illinois agriculture, if the  
9 state were to draw a rule from either the State of  
10 Iowa or the State of Wisconsin, could you comment on  
11 the similarities in Illinois agriculture to the  
12 agriculture in both of those states and as well the  
13 climate of Iowa and Illinois versus Illinois and  
14 Wisconsin and that kind of thing? If you could just  
15 offer any sort of insight into the record as to  
16 that --

17 MS. WILLIAMS: I would just like to  
18 object. I don't think there's any reason to think  
19 that this witness is an expert on Iowa or Wisconsin,  
20 but --

21 BY MS. MANNING:

22 Q. You know, just as a matter of commonality,  
23 Dr. Funk, do you work with -- I'm sure you work with  
24 the University of Iowa and the University of

1 Wisconsin.

2 A. Not the Hawkeyes. Iowa State, Iowa State.

3 Q. If you could explain your expertise in  
4 both those states in terms of agriculture.

5 A. Well, in respect to the objection, I think  
6 what we see different in between -- let's say in  
7 between Wisconsin and Illinois is that Wisconsin is  
8 predominantly a dairy state, Illinois predominantly  
9 swine, and so many, many cases -- we've seen,  
10 for instance, in Wisconsin a very large number of  
11 custom manure haulers compared to in Illinois, but  
12 many of them are liquid manure, semisolid manure,  
13 but also a lot of solid manure systems. In many  
14 cases, they're smaller, smaller acreages, smaller  
15 volumes that they're hauling at a time.

16 The soil conditions are somewhat  
17 different. I'm not a soil scientist, but I realize  
18 that Illinois is a tall state and we've got huge  
19 differences, both climatic and also soils, from  
20 north to south. So, it's a little risky to draw  
21 some comparisons between the two states.

22 The same thing with Iowa. Iowa has some  
23 different situations than we do and they have, in  
24 many cases, longer slopes and -- but perhaps a



1 little more similarity with soil types than we do.  
2 And the latitude is, of course, the same as  
3 Northern Illinois.

4 So, I don't know. I hate to make -- I  
5 hate to make generalizations and I think it's risky  
6 to make generalizations when you're looking at some  
7 of these prescriptive things that we've been  
8 attempting, going from between states.

9 MS. MANNING: Thank you.

10 EXAMINATION

11 BY MS. WILLIAMS:

12 Q. I have tried to get you out of it, but --

13 A. Yes, you did. Okay.

14 Q. Do you know if Iowa and Wisconsin rely on  
15 a P Index or a phosphorus index to determine which  
16 sites are appropriate for winter application?

17 A. Yeah, there's several states that are  
18 going to a P Index. And what a P Index does is  
19 takes a lot of the factors that we've been talking  
20 about with regard to -- mostly with regard to  
21 nutrient movement offsite and try to put a number on  
22 it.

23 And the reason that Illinois -- and I'm  
24 talking about Illinois NRCS in particular -- has

1 been resistant of the P Index from a numerical value  
2 is because Illinois is a tall state; there's a lot  
3 of differences in soils and climate and it's been  
4 very difficult for them to -- for NRCS and soil  
5 scientists to come up with good, reliable numeric  
6 values on phosphorus movement or P Index.

7 I think -- see, what we've done in the  
8 past -- maybe this is more than you wanted to  
9 hear -- but we've used what we call a P Loss  
10 Assessment. And all that is qualitative; it's not  
11 quantitative.

12 But I will say that the federal or the --  
13 yeah, the USDA federal NRCS has asked the states to  
14 develop a P Index and Illinois will be doing  
15 something about that. That's in the works this  
16 fall. So, we will be seeing more -- hopefully more  
17 agreement on some of the factors that go into P Loss  
18 Assessment in this state. And it's going to look  
19 more like, if not Iowa, it may look more like  
20 Kentucky or one of the surrounding states.

21 MS. WILLIAMS: Thank you.

22 MS. MANNING: Thank you.

23 BY MS. WILLIAMS:

24 Q. Maybe I will move on to something that

1 should be pretty easy.

2 A. Easy would be good.

3 Q. Another recommendation that you had in  
4 your testimony is that the Board add three  
5 additional sources for determining manure production  
6 volumes in Section 502.625(b). Did I summarize that  
7 accurately?

8 A. I think so.

9 Q. My first question is is it your  
10 recommendation that these be added to the sources  
11 included or that they replace them?

12 A. It could go two ways.

13 Q. That's why I asked the question.

14 A. If you -- if you add them, then you would  
15 not conflict perhaps with the recommendations that  
16 are already in the LMFA. If you -- if you replace  
17 them, then you would reflect the updated numbers  
18 that are being recognized more by the industry. But  
19 the reason that we changed, for instance --

20 Q. Wait, do you mind if I slow down and  
21 maybe --

22 A. Please.

23 Q. -- take it one piece at a time? Because I  
24 think your knowledge is maybe beyond the rest of us.

1 So, the first issue that I think you raised that I  
2 wanted to get to is the two sources that are  
3 mentioned in the Agency's proposal are also used by  
4 the LMFA; is that correct?

5 A. I believe that's right. And I don't have  
6 the LMFA right in my hand, but that's what I --

7 Q. So, that's what you meant when you were  
8 saying if we added then we would have not a  
9 conflict?

10 A. Yes.

11 Q. So then the second piece you were talking  
12 about was -- now let's move on to why you think  
13 these sources are better.

14 A. The reason they are numerically better is  
15 because, as I stated earlier, the industry has  
16 changed. There have been dietary changes that have  
17 reduced, for instance, the concentration of  
18 phosphorus on the average.

19 If you look at what's happened with the  
20 non-ruminant animals, industry practice has been  
21 with swine and poultry, for instance, to replace  
22 much of the mineral phosphorus in the diet with  
23 synthetic Phytase, which allows the animal to use  
24 the Phytate form of phosphorus that's in the corn

1 and soybeans. So, this gives us a real leg up on  
2 reducing the amount of phosphorus being excreted.  
3 Let's see if I can -- so, that's reflected in the  
4 newer tables, the newer numbers because, as I say,  
5 the industry was changed.

6 The industry has also changed in the size  
7 of the animals and the way -- some of the production  
8 phases of the animals. So, even the average body  
9 weights and things that are, for instance, in those  
10 plant service numbers, the older ones, those  
11 production phases are not being used in the same way  
12 in today's industry.

13 The Waste Management Field Handbook of  
14 NRCS, those numbers have been changed since the  
15 earlier regulations. And also the ASABE standard,  
16 which now recognizes manure excretion quantities and  
17 concentrations based on diet, that's new information  
18 which makes it easier to more accurately predict  
19 excretions.

20 Q. I guess my first question -- I'll try and  
21 ask this as a compound question. If it's too  
22 difficult, then we'll break it up. But the first  
23 question is can you tell us which tables from those  
24 sources folks would be looking at? We'll start just

1 with that one. Are there specific tables you would  
2 turn to for the purpose of this section, which is I  
3 believe volume of manure?

4 A. Yeah, in the NRCS Ag Waste Management  
5 Field Handbook, I believe it's Chapter 4, winter  
6 characteristics or setup tables for the different  
7 animal species, but those are being used by people  
8 writing CNMP.

9 Q. Have you looked at the differences between  
10 the newer tables and the older tables?

11 A. Yes, especially in the MidWest Plan  
12 Service, Number 18, Manure Characteristics, we've  
13 seen a pretty substantial change between the two --  
14 well, certainly in the earlier one that's referenced  
15 in 1998 and the 2004, there have been a big change  
16 in those manure volume and manure nutrient  
17 concentrations, so those are substantial. So, if I  
18 were --

19 Q. How have they changed? Can you just  
20 explain in what -- I think you were saying that  
21 phosphorus has gone down.

22 A. Phosphorus concentration has gone down  
23 compared to nitrogen. And that's what is really  
24 important to this group is if we can get, for our

1 cropping systems, nitrogen and phosphorus in better  
2 balance, we won't have to worry about the phosphorus  
3 buildup in the soil anymore and that --

4 Q. What about volume?

5 A. The volume per animal, for instance, has  
6 gone up. If you look at the dairy numbers, look at  
7 the average Holstein dairy cow, the average manure  
8 production volume per cow has gone up quite a few  
9 percent.

10 So, if I were a plant and I were coming  
11 into a new facility and writing a manure management  
12 plan, estimating what those manure volumes and  
13 nutrient concentrations were going to be, I would  
14 like to have the more updated numbers because in  
15 terms of volume I'm going to make the storages  
16 bigger; in terms of land application areas, I'm  
17 going to have a more accurate picture for how many  
18 acres I'm going to have to have to agronomically  
19 apply the manure. So, I would like to have those  
20 newer numbers.

21 Now, that being said, once the operation  
22 is going, or for an existing operation, we would  
23 want to rely on existing manure samples, soil  
24 samples and manure production volumes that are

1 recorded on site rather than the book values.

2 We always tell producers, "Get your own  
3 data and a plan according to that. Operate  
4 according to that rather than the book values." The  
5 book values are a start. So, for that reason, is it  
6 a show stopper to not have the latest documents  
7 referenced? Perhaps not. But I think it would help  
8 with reducing some of the uncertainty and confusion.

9 Q. Can you tell us whether each of the three  
10 documents or any of the three documents that you've  
11 referenced, are they readily available to members of  
12 the general public?

13 A. Yes, they're all -- the Ag Waste  
14 Management Field Handbook of NRCS is a public  
15 document; it's on the web; it's available for free.  
16 The ASABE standard is available through that  
17 organization, but for nonmembers there is a cost for  
18 that, as any of their standards. And the MidWest  
19 Plan Service document is available through MidWest  
20 Plan Service at Iowa State University. That was not  
21 University of Iowa. Iowa State University. For a  
22 small fee.

23 MS. WILLIAMS: Okay. I don't think I have  
24 anything else on this topic if anyone else has any



1 questions.

2 (There was no response.)

3 BY MS. WILLIAMS:

4 Q. The next thing I would like to talk about  
5 is we've spent a lot of time talking about the  
6 CNMPs, but your testimony focused quite a bit on the  
7 WMPs, the waste management plans developed under the  
8 LMFA. Am I using that terminology acceptably to  
9 you?

10 A. That's good for me, uh-huh.

11 Q. Okay. So, I would like to turn to the  
12 topic of the WMPs. Now, I believe you've already  
13 testified that for facilities -- well, what size  
14 facilities did you testify have to submit their WMPs  
15 to the Department of Agriculture?

16 A. If they're over 1,000 -- oh, submit? For  
17 over 5,000 animal units designed capacity, and those  
18 animal units are as defined in the LMFA.

19 Q. And then I believe you were asked about  
20 when those are submitted whether they are actually  
21 reviewed by the Department of Agriculture. Do you  
22 know anything about that process?

23 A. That is their process and, no, I don't  
24 know. That is part of the regulation that they are

1 to be submitted.

2 Q. Okay. So, those are for 5,000 or greater.  
3 For 1,000 to 5,000 or 1,000 to 4,999, what is  
4 required?

5 A. The requirement is that they prepare and  
6 implement a plan that contains the elements in  
7 900.803 I believe it is and then supply a letter to  
8 the Department of Ag that that plan is complete and  
9 where it is kept on the farm.

10 Q. Okay. Do all large CAFOs under the  
11 federal rule meet the definition of large under  
12 LMFA, which is greater than 1,000 animal units?

13 A. The university is a little different. I  
14 made up a table to delineate those differences. I  
15 don't have it in front of me, but there are a few  
16 differences.

17 For instance, laying hens is somewhat  
18 different. Dairy cows is not substantially  
19 different, although in some cases the LMFA, 1,000  
20 animal units would actually capture more of the  
21 large dairy farms because the federal rule only  
22 looks at one production phase when it counts the  
23 numbers.

24 So, for instance, if you had a dairy farm

1 that had 600 milking cows and 400 heifers, under the  
2 federal regulation, that would not be considered a  
3 large CAFO because you don't have the 700 milking  
4 cows. But under the LMFA, you would count -- if  
5 these were housed at the same facility or within a  
6 quarter mile, then those would be additive, that is  
7 the heifers would count, you know, 0.6 and the cows  
8 would be 1.4 apiece, which I think adds up to more  
9 than the 1,000 animal units. So, in that case the  
10 definitions overlap some, but they're not exactly  
11 the same.

12 Q. And you're identifying one example where a  
13 CAFO could be large under LMFA but not under the  
14 federal rules?

15 A. Right.

16 Q. Did you look at whether there are examples  
17 of CAFOs that are large under the federal rule but  
18 are not large under the LMFA?

19 A. Yes.

20 Q. There are --

21 A. There are a few, uh-huh.

22 Q. Do you recall offhand some of the  
23 examples?

24 A. The one I remember in particular is laying

1    hens where they're using a dry manure system and so  
2    in that case I think for the LMFA they have to have  
3    200,000 laying hens and under the federal rule I  
4    think it's 80,000, 85,000, so there's some  
5    difference there.

6           Q.    What about the scenario that you gave of a  
7    facility with 700 dairy cows? Did you look at  
8    whether a facility with 700 dairy cows -- which  
9    would be large under the federal rule, correct?

10          A.    Yeah, if it's only --

11          Q.    If it just had 700.

12          A.    Well, in that case, you multiply by 1.4  
13    for each animal and if that's over 1,000 -- 1.4  
14    times 700, so --

15          Q.    So, I got 980. Does that --

16          A.    In that case, yeah, you would have to be  
17    more than 700 milking cows, if those were the only  
18    animals on the facility, to be counted a large CAFO,  
19    uh-huh.

20          Q.    And I'm looking at the definition of veal  
21    cow under the federal rule, 1,000 veal calves for a  
22    large CAFO.

23          A.    I didn't look at the veal numbers because  
24    I'm not aware of veal facilities in the state.

1 There may be a few.

2 Q. Okay. Let's try swine. So, there's a  
3 different calculation for swine under 55 pounds; is  
4 that correct?

5 A. Yeah, the swine are pretty much the same,  
6 that is you can get -- until you get to a nursery  
7 facility. But, again, those are pretty rare in the  
8 state now. We've gone mostly to wean-to-finish  
9 facilities, in which case you're counting animal  
10 space as being over-55-pound animal capacity. So,  
11 in every case, if you've got over 2,500 head of  
12 finishing swine, then you would be a large CAFO  
13 under the federal reg or large facility in the LMFA.

14 Q. What would be your approach for a facility  
15 that was an unpermitted large CAFO under the federal  
16 and state regulation but not large for purposes of  
17 LMFA?

18 A. That's a legitimate question.

19 Q. Well, maybe --

20 A. I don't know.

21 Q. Maybe I can ask it an easier way.

22 A. That was easy. I just don't know.

23 Q. Is it your testimony that -- I'm not sure  
24 if I understand exactly what your testimony is with

1 regard to waste management plans for unpermitted  
2 large CAFOs.

3 A. Well, my concern with that is that the ag  
4 storm water exemption be made available to those who  
5 have a plan under the LMFA or under the CNMP.

6 Q. Is it your understanding -- I think --  
7 there's a quote here I'll read to you that says, "I  
8 disagree with the Agency's assertion that an  
9 unpermitted large CAFO operating under an LMFA waste  
10 management plan is unable to assert the statutory  
11 agricultural storm water exclusion."

12 A. That seems to be --

13 Q. Is that your understanding?

14 A. That seems to be -- that's my  
15 understanding of the proposal.

16 Q. Okay. Can you tell me what it's based on?

17 A. I would have -- I would have to go back to  
18 the details. These are -- sorry, it's kind of --  
19 it's running together on me.

20 Q. Have you heard the Agency say that the  
21 plan may or may not be adequate under its proposed  
22 opinion on the facts of this situation?

23 A. No, it's only -- my comment is only based  
24 on my reading of the proposal.

1           Q.    Okay.  I guess I would like to understand  
2   then the difference in your recommendation.  Are you  
3   talking about allowing for use of WMPs to satisfy  
4   the agricultural storm water exemption or requiring  
5   that in every case a waste management plan be  
6   accepted as qualifying a facility for an  
7   agricultural storm water exemption?  Do you  
8   understand the difference?

9           A.    No, I'm not sure I do.

10          Q.    Do you feel that every facility that has  
11   ever prepared a waste management plan is entitled to  
12   the agricultural storm water exemption?

13          A.    Well, there's a fine point, but certainly  
14   the waste management plan has to be properly  
15   implemented in order for it to be recognized, not  
16   just the preparation.

17          Q.    Do you agree that the Agency's proposal  
18   does not require the development of a plan for  
19   unpermitted large CAFOs but simply that specific  
20   practices are followed?

21          A.    That's not the way I read it, that they  
22   have -- there are many elements of a plan that they  
23   have to maintain and they have to maintain the  
24   records.

1 Q. Let's talk in the hypothetical then. If  
2 it were the case, then your understanding that the  
3 Agency's proposal only required certain minimum  
4 practices to be followed by unpermitted facilities  
5 and not that a specific type of plan was prescribed,  
6 if that was the rule as it was adopted --

7 A. Yes.

8 Q. -- would it be your testimony that that  
9 would be flawed for unpermitted large CAFOs, that  
10 instead we should require them all to develop a  
11 waste management plan under the LMFA?

12 A. I guess I'm not sure what the -- if  
13 they're going to claim the ag storm water exemption,  
14 is that not -- that is the stipulation, that they  
15 have the developed plan and it's implemented. I'm  
16 not --

17 Q. The Agency's testimony in August -- and I  
18 don't want to testify; I don't want to go beyond --  
19 just stop me if I'm going too far. But my  
20 understanding of our testimony at the hearing  
21 explaining our proposal that no specific plan is  
22 required of unpermitted large facilities, we have  
23 simply laid out practices that must be met to  
24 qualify for agricultural storm water exemption, so



1 that's why I'm trying to understand if your proposal  
2 would simply be that we allow if a plan has met  
3 those practices to be used -- which I think we  
4 would -- or if you're requiring a certain type of  
5 plan to be developed by all --

6 MS. MANNING: And if I could interject as  
7 a point of order as well and object to kind of this  
8 whole line of questioning in that, Number 1, I don't  
9 see Dr. Funk's testimony as a proposal to the Board  
10 at all.

11 Dr. Funk is here to testify as an expert  
12 witness and answer certain questions and it seems  
13 like the EPA is trying to get him to suggest what  
14 the Board should or shouldn't do when his testimony  
15 in reality is to give you support, information and  
16 science behind the proposal and question those kinds  
17 of things.

18 I'm now confused as well about the EPA's  
19 proposal because it's always been our understanding  
20 on the agricultural community side that an  
21 unpermitted large facility would not be able to,  
22 under the Agency's proposal, take advantage of what  
23 otherwise would be an agricultural storm water  
24 exemption but for using the tools that are proposed

1 in this regulation, and the Coalition has objected  
2 to that approach and I think that's --

3 MS. WILLIAMS: Okay. I don't -- are you  
4 arguing an objection now or are you trying to  
5 testify? I mean, I understand that we want him to  
6 understand the framework within him giving his  
7 expert advice. That's all I'm trying to get to,  
8 too.

9 DR. FUNK: I guess I would say that in  
10 many cases the practices are the plan. The  
11 practices that are in the proposal are -- make a  
12 large part of the plan, so I'm not sure of the  
13 distinction, but --

14 BY MS. WILLIAMS:

15 Q. But if our proposal does not require  
16 someone to develop a plan and the LMFA does not  
17 require them to develop a plan, are you asking us to  
18 require people who are otherwise not required by the  
19 LMFA to develop a waste management plan to do so?

20 A. I think the federal regulation requires  
21 that if you're going to claim the ag storm water  
22 exemption, you have to have the protection of a  
23 nutrient management plan and it has to be  
24 implemented in order to claim it.

1 Q. Okay. That's your testimony then? Okay.

2 A. That's the way I understand it.

3 Q. So, your testimony is the federal rule  
4 requires all unpermitted large facilities and all  
5 permitted facilities to have a nutrient management  
6 plan?

7 A. If they want to claim the ag storm  
8 water exemption.

9 Q. All right. That's fine. I would like to  
10 read another quote from your testimony just to help  
11 lay foundation for the next question.

12 "I would suggest that the Board modify the  
13 regulatory proposal to ensure that an unpermitted  
14 large CAFO already having a manure management plan  
15 under LMFA would be allowed to operate under its  
16 existing plan and to continue to be allowed to  
17 assert the agricultural storm water exclusion,  
18 provided that annual plan updates are performed and  
19 appropriate notifications are done regarding any  
20 substantial changes to the facility's nutrient  
21 management plan overtime."

22 So, is it your testimony that it would be  
23 appropriate for unpermitted large CAFOs to notify  
24 the Agency when there are substantial changes to the

1 plan overtime?

2 A. I think that the appropriate modifications  
3 would be to the Illinois Department of Agriculture  
4 should they be operating under the LMFA because that  
5 is the agency that they are -- the department that  
6 they are responding to with the LMFA waste  
7 management plan.

8 Q. So, you don't think they should go to the  
9 Agency then?

10 A. I do not see the reason for it, but the  
11 other part was about --

12 Q. But let me -- let's stay on this part real  
13 quick.

14 MS. MANNING: Let's let him answer the  
15 question.

16 BY MS. WILLIAMS:

17 Q. If notification is not required to the  
18 Department of Ag for these facilities that we're  
19 talking about in the gap, so they're unpermitted  
20 large, they don't have to do the plan for  
21 Department of Ag, should there be a notification and  
22 an update?

23 A. For -- okay. So, unpermitted large CAFO  
24 but is not at the size designation required to have

1 an LMFA? Well, again, I think the intent is that if  
2 a facility of that size wants to -- wants to claim  
3 the ag storm water exemption, then they need to have  
4 a nutrient management plan and have it implemented.

5 Q. And updated?

6 A. And updated. I imply updates.

7 Q. So, when you say appropriate notification,  
8 do you mean that if they are not covered by LMFA  
9 then there doesn't need to be any notification?

10 A. That's true.

11 Q. How would the Agency know whether a CAFO  
12 has a waste management plan in place or not? Under  
13 the LMFA I'm talking about, not under our proposal.

14 A. Under LMFA?

15 Q. Just under LMFA, if we were going to  
16 recognize these plans, as I think you're suggesting  
17 recognizing them, how would we know?

18 A. There should be a record at the  
19 department. Illinois Department of Ag should have a  
20 record of whether the facility has a plan. And if  
21 they're above a certain size, they should have a  
22 record that they have received the plan and have  
23 approved it.

24 Q. Do you think we should ask them to --

1 well, what about if the plan is inadequate? Like  
2 when you say under LMFA, recognize the waste  
3 management plan under LMFA, do you mean only that it  
4 would be one that's fully compliant and adequate  
5 with -- adequate under the LMFA?

6 A. Well, I think's the assumption, that  
7 the -- that there are elements laid out in the LMFA  
8 that the producer has to address.

9 Q. Where in the process would you envision we  
10 determine whether the plan is adequate?

11 A. And at this point you're asking if there  
12 is a question about whether they would be covered by  
13 the ag storm water exemption?

14 Q. Yes.

15 A. I would -- I guess I would suggest that  
16 you would have to go to the production facility,  
17 look at the plan and especially look at the records  
18 and see if the records match up with the plan that's  
19 been implemented.

20 Q. But what if the plan that was developed  
21 was inadequate originally and the records match  
22 that?

23 A. Then it would be difficult to claim the  
24 storm water exemption. And I think that's what we

1 try to tell our producers, that you have to come up  
2 with a good starting plan for the facility and then  
3 constantly update that and keep records to keep it  
4 enforced and keep it updated.

5 MS. WILLIAMS: I've asked quite a few of  
6 my questions. I think I would just like to look  
7 over my notes and see what might be left, so if  
8 someone else has any follow-up.

9 MR. RAO: Maybe I will ask a question.  
10 This goes back to, you know, your recommendation to  
11 remove some of the prescriptive requirements under  
12 502.630 for the winter applications.

13 As an example, you gave those two sections  
14 that deal with the phosphorus and setbacks. Do you  
15 have any other problems in that section that you  
16 feel are prescriptive that we need to look at?

17 DR. FUNK: Not -- no, not at this time.

18 MR. RAO: So, those are the --

19 DR. FUNK: Those are the two that came to  
20 mind.

21 MR. RAO: Thank you.

22 EXAMINATION

23 BY MS. MANNING:

24 Q. I have a follow-up as well. You testified

1 that it's your understanding in the federal rule  
2 that in order to claim the storm water exemption  
3 that you need to have a nutrient management plan.

4 As I understand your testimony, someone  
5 who had a nutrient management plan pursuant to --  
6 the federal rule is not as prescriptive, would you  
7 agree with me, as the proposed regulation that is  
8 being proposed here to the Board, Number 1? Would  
9 you agree with that?

10 A. That is correct.

11 Q. And, secondly, the federal rules allow for  
12 flexibility in terms of what that waste management  
13 plan or nutrient management plan really contains?  
14 Would you agree with me there as well?

15 A. Yes, and I think the basic tenets are that  
16 you balance the nutrients that are being produced  
17 with the agronomic use of those nutrients in such a  
18 way that they do not pose a risk to water.

19 Q. So, what I hear you saying is that a  
20 producer who has a waste management plan pursuant to  
21 the Livestock Management Facilities Act ought to be  
22 able to claim the waste -- the livestock waste  
23 exemption -- I mean the agricultural storm water  
24 exemption --



1 A. Storm water exemption.

2 Q. -- even under the federal scheme.

3 A. Yes.

4 MS. MANNING: Okay. Thank you.

5 DR. FUNK: That's my intention.

6 HEARING OFFICER: Ms. Williams, let me  
7 interrupt you. We have been back at it for about  
8 90 minutes. You requested some time to look at your  
9 notes, which is fair.

10 Why don't we take a 15-minute break.  
11 We've, of course, exhausted all of the comments, the  
12 public comments that were offered. I suspect that  
13 we are winding down -- although I don't intend to  
14 put a limit on your questions -- winding down the  
15 questions for Dr. Funk and then the Board had some  
16 questions that we had already put on the record that  
17 I suspect we can address fairly quickly.

18 Why don't we do that quick 15-minute  
19 break, resume promptly and try to wrap up our  
20 business here as quickly as possible. Why don't we  
21 come back at 25 to 2:00 and then we'll resume then.  
22 Thanks.

23 1:18 p.m. (At this point in the  
24 proceedings, a short recess was taken.)

1 1:39 p.m.

2 HEARING OFFICER: Thank you once again,  
3 everyone, for returning from the break. It is 25 to  
4 2:00 and we do want to get underway.

5 When we had taken that break,  
6 Ms. Williams, I believe that you had had some  
7 follow-up questions for Dr. Funk. If you have  
8 remaining questions, I'm sure he would be willing to  
9 return to the podium for the resumption of those.

10 MS. WILLIAMS: I have just maybe three or  
11 four more quick ones, I hope.

12 HEARING OFFICER: Very good. Dr. Funk is  
13 on his way up to the podium. Thank you very much,  
14 Dr. Funk, and we will get underway in just a second.

15 EXAMINATION

16 BY MS. WILLIAMS:

17 Q. Thank you, Dr. Funk. I promise I will try  
18 to wrap it up quickly. Early on in your testimony,  
19 you had mentioned three key elements to rely on for  
20 facilities desiring coverage under NPDES. These  
21 were robust summaries and plans, good records and  
22 adequate storage capacity.

23 I want to talk a little bit about what you  
24 mean by good records. What do you think is a

1 measurement of good records and how can the Board  
2 ensure an enforceable requirement for good records?

3 A. Well, I think that's two questions, but  
4 the good records, I think there are several elements  
5 in the good records that are listed already in the  
6 LMFA and others, but --

7 Q. I hate to ask you for a citation, so maybe  
8 I can just say do you --

9 A. Well, LMFA 900.803 and the list of  
10 recordkeeping requirements after that. Can I take a  
11 look?

12 Q. Yeah.

13 A. It's got a list of records.

14 (At this point in the proceedings, an  
15 off-the-record discussion was had.)

16 HEARING OFFICER: Ms. Williams, maybe the  
17 best course would be for you to repeat the question  
18 that you had posed, please.

19 BY MS. WILLIAMS:

20 Q. My question I think was what is a  
21 measurement of good records and you were mentioning  
22 LMFA; I think I asked where in LMFA.

23 A. Yes, and already I don't have the number  
24 there that you mentioned, but those are mainly

1 records of waste disposal, which includes the  
2 amounts of the acreages, the fields that those  
3 winter applications were made on, also the manure  
4 samples and soil samples; those have to be recorded.

5 And the quality again of those records  
6 would be measured by, of course, how they -- how  
7 they add up to the appropriate -- the agronomic  
8 application rate on those acreages and whether the  
9 timing of the soil samples and timing of the manure  
10 samples were correct, and then the number of those  
11 samples, the kinds of things that a consultant could  
12 look at those records and make sense of how the  
13 operation had been managed.

14 Q. Do you think that this concept of good  
15 recordkeeping would apply to the facilities we were  
16 discussing earlier that are unpermitted large  
17 facilities?

18 A. You mean the unpermitted large facilities  
19 who hope to get the --

20 Q. -- agricultural storm water exemption,  
21 correct.

22 A. Yes, I would say that the quality of  
23 records is essential to that --

24 Q. Okay.

1           A.    -- because otherwise there's no way that  
2    you could maintain that you had applied manure in  
3    accordance with your plan.

4           Q.    On a separate topic, do you believe that  
5    the LMFA requires sampling of manure for --

6           A.    Yes.

7           Q.    It requires it?

8           A.    It requires it, regular sampling and a  
9    record of those sample analyses.

10          Q.    So, you don't think that it gives the  
11   producer the choice between sampling and using one  
12   of the tables we discussed earlier?

13          A.    No, no. The only way that you can use the  
14   tables that we discussed earlier is if you have a  
15   new facility or it's a new plan that you're writing  
16   before the first set of manure applications.

17                So, what I'm saying is that the -- my  
18   understanding, the LMFA says, yes, you can use book  
19   values if there are no numbers yet from your own  
20   operation; it's expected that you generate the  
21   numbers as soon as those are feasible.

22          Q.    Can you point to somewhere in the LMFA  
23   that says that?

24          A.    Have you got it close?

1 (Document tendered.)

2 A. Okay. 900.805(a), "The owner or  
3 operator" -- and this is statutory -- "may prepare a  
4 plan" -- and that's prepare a plan -- "based on an  
5 average of the minimum and maximum numbers in the  
6 table values," and so on. But, also, it implies  
7 throughout the rest of the text that the samples are  
8 required and that the updates have to be continually  
9 made based on the results of manure samples, soil  
10 samples and so on.

11 Q. But, Dr. Funk, doesn't the sentence that  
12 you just -- you started reading it and then you  
13 stopped. It says, "The owner or operator may  
14 prepare a plan based on an average," and then it  
15 says, "or the results of analysis performed."

16 A. "On samples of waste," right.

17 Q. It's "or," right? You can either --

18 A. It's always preferred, always preferred if  
19 you have them, but --

20 Q. But it's not required; is that correct?

21 A. For the first-time preparation of the  
22 plan, but from then it's contingent on the operator  
23 to continually update the plan based on the samples  
24 and the actual manure production that occurs on the

1 farm.

2 Q. So, you're saying there's a different  
3 section of the regulations that require you to  
4 sample manure after you're up and running?

5 A. Yes, in (b), (b)(1), "Shall annually  
6 obtain a laboratory analysis of nutrient content of  
7 the livestock waste," and also in regard to soil  
8 sampling and so on.

9 HEARING OFFICER: And just for the record,  
10 Dr. Funk, you're referring to Section 900.805.

11 DR. FUNK: 805(b), yes.

12 HEARING OFFICER: Thank you very much.

13 BY MS. WILLIAMS:

14 Q. Okay. Do you think, Mr. Funk --  
15 Dr. Funk -- I'm sorry -- that one of the aspects of  
16 recordkeeping needs to be that records are kept of  
17 the manure and soil sampling that's done?

18 A. Yes, yeah, that's a large part of the  
19 recordkeeping process is to make sure that samples  
20 are done properly and that those numbers are  
21 recorded and that the plan update then reflects the  
22 new numbers.

23 Q. Thank you. I just have maybe one more.  
24 Does the LMFA define what adequate erosion control

1 practices are?

2 A. No, it doesn't. And that's the same  
3 wording as in the old Title 35, Subtitle E, so that  
4 ambiguity has been with us for a long time.

5 Q. Does the LMFA talk about what are  
6 appropriate buffers, or does it require  
7 identification of appropriate buffers?

8 A. It requires certain setbacks; it requires  
9 that no manure be spread in grass waterways; it has  
10 a 200-foot setback. If you're talking about  
11 setbacks as buffers --

12 Q. But only setbacks, not other types of  
13 buffers?

14 A. Yes. It doesn't, as I recall, make much  
15 distinction between vegetative and non-vegetative  
16 buffers.

17 Q. And I believe you testified earlier when  
18 we were talking about CNMPs that the LMFA does not  
19 require the field-specific site assessment.

20 A. It is not as -- it only implies that, but  
21 it does not specify it.

22 Q. Does the LMFA require that CAFOs have  
23 enough land application areas identified for all of  
24 their waste?



1           A.    Yes.

2           Q.    It doesn't allow them to transfer to  
3 others and not account for it?

4           A.    It does allow to transfer offsite to --  
5 but it has to provide in the plan to show that  
6 adequate land is available, manure lease agreements  
7 or through some permanent arrangement for offsite  
8 transfer to others.

9           MS. WILLIAMS:  I don't think I have any  
10 other questions at this point.

11           HEARING OFFICER:  Thank you.

12           MS. WILLIAMS:  Thank you so much,  
13 Dr. Funk.

14           HEARING OFFICER:  Thank you, Ms. Williams.  
15 Ms. Dexter, Ms. Manning, any follow-up questions  
16 while Dr. Funk is at the podium?

17           MS. DEXTER:  None for me.

18           HEARING OFFICER:  I believe the Board has  
19 asked all of the questions it has and, Dr. Funk,  
20 with that, thank you for your testimony and for all  
21 of the questions to which you have responded to.  
22 Thank you very much.

23                    And with that, we can turn to what is our  
24 effectively final order of business and,

1 Ms. Manning, I know the Board appreciates the  
2 willingness of the Agricultural Coalition to respond  
3 to some questions that the Board had raised at the  
4 hearing.

5           Was it your intention to swear  
6 Mr. Kaitschuk, for instance, in to answer those? We  
7 can do that. Or if you foresaw that you might rely  
8 on one or more other persons, it might be most  
9 productive to swear them in as a panel and take care  
10 of that at once. Do you have any sense on what the  
11 best way to proceed on the business was?

12           MS. MANNING: I was hoping to field those  
13 questions myself in that the only technical question  
14 related to the frozen soil I think we've talked  
15 about ad infinitum today, so we're not going to  
16 discuss that any further in terms of our  
17 Recommendation Number 2.

18           The other recommendations were largely  
19 legal issues and legal clarifications that we would  
20 seek, and I'm happy to answer any questions that the  
21 Board may have about those. I've gone through the  
22 transcripts and I think I know where we are with all  
23 of those, I mean, in terms of the definition of  
24 livestock waste.

1           If you want me to testify, I'm happy to do  
2   that.  If you want me to just do this in terms of  
3   legal clarification, I can do that as well.

4           HEARING OFFICER:  Why don't -- were you  
5   going to intend to rely upon Mr. Kaitschuk or any  
6   other technical witnesses at all?

7           MS. MANNING:  No, I don't think so.

8           HEARING OFFICER:  Then maybe it makes the  
9   most sense to swear you in since you will be  
10  fielding and responding to those questions,  
11  Ms. Manning.  Thanks for your willingness to do so.

12           (At this point in the proceedings, the  
13   Court Reporter administered the oath.)

14           HEARING OFFICER:  Ms. Manning, I actually  
15  do want to begin very, very briefly.  You had  
16  referred to an issue of frozen ground, particularly  
17  the difference in risk of runoff between soil that's  
18  frozen to a depth of one-half inch and two inches,  
19  as the Coalition had proposed.

20           It sounds as if your position is that the  
21  Coalition at this point has nothing to add to what's  
22  already been introduced into the record on that  
23  issue.

24           MS. MANNING:  That is correct.  We assumed

1 that if the Board had continued to have that  
2 question, you would have asked it of Dr. Funk. I  
3 think he probably is a better expert than any of us  
4 in terms of seeking a response to that question.

5 HEARING OFFICER: Very good. Let me  
6 jump --

7 MS. MANNING: We may have further  
8 testimony in the Jo Daviess County hearing, but at  
9 this point we would rely on the testimony of  
10 Dr. Funk on that point.

11 HEARING OFFICER: Very good. Thank you  
12 for that clarification, Ms. Manning. I will jump  
13 right ahead, as you had referred to, to the issue of  
14 the definition of the term livestock waste. And  
15 forgive me if I'm paraphrasing. The Coalition's  
16 proposal was to strike from the Agency's proposed  
17 definition the elements of sludge and contaminated  
18 soils from storage structures.

19 Can the Coalition elaborate a bit on its  
20 reason for recommending that, particularly perhaps,  
21 Ms. Manning, in light of any operational  
22 difficulties or economic factors that might result  
23 from including those terms in the definition?

24 MS. MANNING: Well, I would suggest to you

1 that that proposal comes from this thought process.  
2 Number 1, those particular -- those particular words  
3 mean something in environmental law, sludge and  
4 contaminated soil from storage structures, and they  
5 are no where to be found in the current definition  
6 of livestock waste in the Livestock Management  
7 Facilities Act, nor are they contained in any  
8 version of livestock waste in the federal parameter,  
9 either in the federal rules or in the federal law,  
10 and those particular -- that particular phraseology  
11 comes more from a land perspective.

12           You all know that we recently had a  
13 rule-making before the Board related to what is  
14 contaminated soil. So, those are inflationary words  
15 where people don't really have a good understanding  
16 of what is meant by that.

17           It's a land issue. We're talking about  
18 manure here. We are not talking about contaminated  
19 soils. We are not talking about chemicals from  
20 farms. We are talking about a water rule-making  
21 regulated by the Bureau of Water and the EPA, not  
22 the Bureau of Land and the EPA. And if the Board  
23 has any questions, I guess the question to the  
24 Agency would be where are they coming up with that

1 phraseology? Because we, as the producers,  
2 representing the producers, they don't have an  
3 understanding of what that means.

4 MS. DEXTER: Can I ask a follow-up?

5 MS. MANNING: I'm not done yet.

6 MS. DEXTER: Yeah, that's fine.

7 MS. MANNING: They just don't understand  
8 what that means, and so if they don't understand  
9 what that means, they would not know how that was  
10 going to be enforced, so that was the point that we  
11 have.

12 There's no background for why that  
13 particular phraseology belongs in this rule that's  
14 derived from the Clean Water Act and pursuant to the  
15 Agency's delegated authority under federal law under  
16 again the Clean Water Act.

17 So, you know, we suggested a different  
18 phraseology of livestock waste. Our major concern  
19 is to get that language out of there because nobody  
20 knows what it means and it's dangerous from an  
21 enforcement perspective.

22 HEARING OFFICER: Ms. Manning, thank you  
23 for that elaboration. If I may recognize Ms. Dexter  
24 for a follow-up question, please.

1 MS. DEXTER: Ms. Manning, is it your  
2 position that contaminated soil and sludge should be  
3 part of the --

4 MS. MANNING: It's our position that the  
5 Clean Water Act and the delegated authority here  
6 regulates manure, and that's what we're talking  
7 about. Any sort of wash water and -- but  
8 contaminated soil is not a phrase in the Clean Water  
9 Act as it relates to CAFOs and it should not be  
10 here.

11 MS. WILLIAMS: Okay. I have a follow-up  
12 also. Ms. Manning, do you consider sludge or soil  
13 that has been removed from an earthen lagoon and  
14 land-applied to meet the definition of livestock  
15 waste?

16 MS. MANNING: Repeat that.

17 MS. WILLIAMS: Do you consider sludge or  
18 soil that has been removed from an earthen lagoon at  
19 a CAFO to meet the definition of livestock waste,  
20 i.e. other materials polluted by livestock?

21 MS. MANNING: Yes, it would be livestock  
22 waste.

23 MS. WILLIAMS: Okay. Thank you. That's  
24 all I needed.

1 HEARING OFFICER: Ms. Dexter, I see an  
2 indication that you have a further question.

3 MS. DEXTER: It was more of a comment  
4 than --

5 HEARING OFFICER: Then if it's not a  
6 question, then perhaps we should move on.  
7 Ms. Manning, thank you for that elaboration, which I  
8 appreciate.

9 I have a couple of follow-up questions,  
10 particularly with regard to the Coalition's proposed  
11 addition of the new Section 502.107 and that would  
12 in its entirety, as proposed by the Coalition,  
13 provide that no NPDES CAFO permit shall be required  
14 for any facility which is not discharging or has not  
15 yet received livestock.

16 Could you explain whether from the  
17 Coalition's perspective that proposed new language  
18 would be consistent with the Agency's general  
19 intent, which I believe I can say fairly is to  
20 require NPDES permits for CAFOs that discharge  
21 pollutants into the waters of the United States.

22 MS. MANNING: Yes, that's my understanding  
23 of the Agency's intent. This would be consistent  
24 with what their statement of reasons suggested.



1 HEARING OFFICER: Very good. Would you --  
2 from the Coalition's perspective, would you clarify,  
3 Ms. Manning, whether an NPDES permit would be  
4 required on the part of the facility only if the  
5 discharge was ongoing.

6 MS. MANNING: Yes, the federal regulations  
7 themselves and the preamble to them talk about a  
8 discharge that has been corrected. And if a  
9 discharge has been corrected, an NPDES permit is not  
10 necessarily required.

11 So, if a discharge has not been corrected  
12 and is expected or is intermittent or is ongoing, an  
13 NPDES permit would be required. But what we're  
14 wanting the Board to be very clear about is what  
15 federal law has established in the Waterkeeper's  
16 decision and the National Pork decision, that if  
17 there is no discharge, there need not be an NPDES  
18 permit.

19 And our experience has been different than  
20 that in the enforcement context with the attorney  
21 general's office and the EPA. And we might provide  
22 further testimony on that at a later date. I  
23 certainly could do so because I represent a lot of  
24 those people. But the fact of the matter is, our

1 enforcement perspective has been different, that  
2 NPDES permits are expected even when the discharge  
3 has been corrected.

4 HEARING OFFICER: And you had touched on  
5 this, and forgive me if I'm being a bit repetitive.  
6 Since that permit, NPDES permit, would be required  
7 only on the basis of what you said, an ongoing  
8 discharge, does the Coalition have a position on how  
9 intermittent discharges would, in fact, be addressed  
10 under the proposal?

11 MS. MANNING: No, we didn't come up with  
12 the terminology "intermittent discharge." I think  
13 you did in your question. It would seem to me that  
14 if a facility is going to have an intermittent  
15 discharge, that's an ongoing discharge and that  
16 would require an NPDES permit.

17 HEARING OFFICER: Ms. Manning, I had  
18 another question on that general issue, if I may.  
19 Would you clarify again from the perspective of the  
20 Coalition offering the motion whether a facility  
21 which is designed to discharge is not required to  
22 apply for an NPDES permit until the facility either  
23 begins discharging -- strike that -- is not required  
24 to apply for an NPDES permit until that facility

1 begins discharging into the waters of the  
2 United States.

3 MS. MANNING: That certainly wasn't our  
4 intent with this particular language. Certainly,  
5 if -- first of all, a facility is not going to  
6 design itself to discharge in most of these  
7 instances. They're going to try to not have a  
8 discharge. So, it's kind of like a situation  
9 where -- I can't imagine that happening, that  
10 somebody is going to design a facility to discharge,  
11 so that's Number 1.

12 But, Number 2, the second part of that  
13 request that we made, which is not yet receiving  
14 livestock -- which has not yet received livestock,  
15 the reason we proposed that is we -- some of our  
16 producers have had experience where an NPDES CAFO  
17 permit was suggested and required of a facility even  
18 before they received their first load of livestock.

19 And the point we're trying to make is you  
20 can't have a CAFO permit if you're not even a CAFO  
21 yet; you haven't had a livestock permit.

22 Potentially, a construction -- a storm  
23 water construction permit and NPDES permit may be  
24 required, but certainly a CAFO permit ought not to

1 be required until they are a CAFO, an operating  
2 CAFO. So, that was our point with the second part  
3 of that proposal.

4 HEARING OFFICER: Very good.

5 MS. WILLIAMS: But I think he's -- the  
6 Board -- I mean, I would like to follow up a little  
7 bit. I think the Board has identified a significant  
8 concern with the language, even if it's practically  
9 not going to be common.

10 How do you envision under your proposal a  
11 facility that wants to be sure they have obtained a  
12 permit in time to have it in place for when the  
13 animals arrive, how do you see that working? When  
14 will they apply?

15 I mean, I believe the Agency's proposal is  
16 designed to address making sure that a new facility  
17 could get their permit in time to start operating.

18 MS. MANNING: Number 1, I didn't hear the  
19 Board, Ms. Williams, with all due respect, in the  
20 same manner that you heard the Board ask the  
21 question.

22 This language that we're proposing does  
23 not prohibit anyone at all from applying for a  
24 permit. It does not say that. It just says that no

1 permit shall be required in these circumstances  
2 where a facility is not discharging or has not yet  
3 received livestock.

4 If a facility wants to get a permit  
5 because it's going to have a discharge, they can do  
6 so at any period and point in time that they would  
7 like to. This does not suggest that they not do  
8 that. It simply says you don't need it until you  
9 have livestock.

10 And, again, that particular -- the second  
11 part of that was responsive to a situation that one  
12 of our producers had. The first part of that is  
13 obviously responsive to Waterkeeper's and National  
14 Pork and in keeping with the Agency's statement of  
15 reasons.

16 MS. WILLIAMS: Would the language prohibit  
17 a CAFO from voluntarily applying for a permit if  
18 they do not currently have a discharge but are  
19 concerned they may discharge in the future?

20 MS. MANNING: Absolutely not.

21 MS. WILLIAMS: So, when it says, "No CAFO  
22 permit shall be required for any facility which is  
23 not discharging," that wouldn't prohibit someone  
24 from voluntarily obtaining one, correct?

1 MS. MANNING: That's correct.

2 MS. OLSON: This is Joanne Olson. Can you  
3 please explain to me how your proposed  
4 Section 502.107 is different than the Agency's  
5 proposal at Section 502.101(b), which states, "The  
6 owner or operator of a CAFO must seek coverage under  
7 an NPDES permit if the CAFO discharges."

8 MS. MANNING: That's just another way of  
9 saying it more in the affirmative and less in the --

10 MS. OLSON: So, you're saying that your  
11 suggestion is already covered by our proposal?

12 MS. MANNING: 502? Would you give me the  
13 number again, please.

14 MS. OLSON: Section 502.101(b) states,  
15 "The owner or operator of a CAFO must seek coverage  
16 under an NPDES permit if the CAFO discharges." And  
17 then it goes on to provide -- it talks about past  
18 discharges from a CAFO does not trigger a duty to  
19 apply for a permit if the conditions that gave rise  
20 to the discharge have been corrected and the CAFO  
21 modified its design, construction, operation and  
22 maintenance in such a way as to prevent discharge  
23 from occurring in the future. It further provides  
24 that no permit shall be required under this section

1 if not required under the Clean Water Act and  
2 federal regulations pursuant thereto.

3 MS. MANNING: This particular -- we don't  
4 see this particular language as inconsistent with  
5 that at all; it's just another way of saying it and,  
6 as well, it provides perfection -- it provides  
7 protection for the operation that is not yet a CAFO.

8 MS. OLSON: Thank you.

9 HEARING OFFICER: Anything further on the  
10 proposed Section 502.107?

11 MS. WILLIAMS: I just have --

12 MR. RAO: Just for clarification, in the  
13 same section, 502.101, Subsection (f) deals with the  
14 issue of preventing animal feeding operations as  
15 defined as CAFO. Does that address your concern  
16 regarding a CAFO without animals?

17 MS. MANNING: Not really. It's not as  
18 specific as the proposal that we made is. This just  
19 goes to the definition -- this actually -- I believe  
20 this language just basically means if you have swine  
21 and are a CAFO as a result of swine, if you change  
22 to cattle, you're still a CAFO. It doesn't address  
23 the situation where the state is saying you need a  
24 permit before you can even have animals.

1 MR. RAO: And one last question. Would it  
2 be acceptable to the Ag Coalition if the Board does  
3 accept your suggestion to add, you know, your  
4 recommended language of a subsection into this --

5 MS. MANNING: Absolutely.

6 HEARING OFFICER: Any further --

7 MS. MANNING: And on that point, I would  
8 simply state that the Ag Coalition at the very  
9 outset of this talked about how we had spent a lot  
10 of time working with the Agency with its rule-making  
11 and we just wanted to get to the Board as soon as  
12 possible with our suggested changes.

13 It's not to suggest we won't have more  
14 later at the conclusion of this. We did -- we  
15 styled it as a motion simply to make sure that the  
16 Board gave attention to it and certainly we had no  
17 problem whatsoever with people responding however  
18 they did because we knew that there would be  
19 responses throughout the course of this proceeding.

20 So, we appreciate that the Board clarifies  
21 our intention, but our intention was simply to just  
22 get on the record what kinds of changes we were  
23 looking for.

24 HEARING OFFICER: Any further follow-ups?



1 I did have one more question on the part of the  
2 Board. And, Ms. Manning, this is a hypothetical.  
3 It's not brief, so I apologize in advance and please  
4 ask me to clarify.

5 There was, both in your motion to amend  
6 the proposal and at the first hearing, some lengthy  
7 discussion I think about the appealability of the  
8 Agency's designation of a facility as a CAFO.

9 And if we assume hypothetically that that  
10 is not appealable to the Board, a determination that  
11 a facility is a CAFO, and assume hypothetically that  
12 to avoid any liability for operating without a  
13 permit that the Agency would plainly under those  
14 circumstances believe to be required of that  
15 facility and the application is granted precisely --  
16 hypothetically, the application for a permit is  
17 granted precisely as it was requested, is there a  
18 risk under Section 40 of the Act that allows the  
19 denial or the grant of -- the appeal of a denial of  
20 a permit or a grant of permit with conditions that  
21 there would be a series of two decisions, neither of  
22 which had an opportunity for appeal to the Board,  
23 would you consider that a risk? And elaborate to  
24 the extent that you'd like.

1 MS. MANNING: Yes, I appreciate that and I  
2 hope, Mr. Hearing Officer, that I understood the  
3 question because it was pretty long and --

4 HEARING OFFICER: And there were three  
5 layers of hypotheticals?

6 MS. MANNING: Exactly. The first  
7 hypothetical, which would not be a hypothetical  
8 because I think it's the intention or how the rule  
9 reads to us at least, and that is the Agency has the  
10 ability to make a designation and while under the  
11 federal rule the designation is as to what CAFO you  
12 might be, as we read the Agency's rule, the  
13 designation is that you need a permit.

14 So, once that designation is made, the  
15 producer has no choice, it seems to me, except to go  
16 get that permit. And it seems to me that particular  
17 decision is a decision that impacts rights and  
18 responsibilities of the producer, and that decision  
19 is a final decision of the Agency because it makes  
20 the producer act and that decision, i.e. that a  
21 permit is required, ought to be appealable to the  
22 Board pursuant to the Environmental Protection Act.

23 It's not the regular scenario and that's  
24 because it's not a regular scenario that the EPA has

1 then the authority of prescribing to a producer or  
2 an industry or a business that they need a permit  
3 and then, therefore, they have to go back because  
4 the EPA says so.

5           Generally the provision, as you know, is  
6 everybody knows that they have to get a permit; they  
7 decide, "Yes, we're going to get a permit." The  
8 appealability comes after you get a permit and you  
9 don't like the conditions that were put on the  
10 permit.

11           This particular scenario was a strange one  
12 in the law and it seems to me the real disconnect  
13 here is that the Agency, without the Board's input  
14 whatsoever, determines who does and who does not  
15 need a permit without any input on the part of the  
16 producer at all, without any input -- and so that's  
17 really the problem that we see with this designation  
18 issue.

19           Certainly, there's always an appeal that  
20 you can have after the permit is issued, but at that  
21 point the producer has gone through the cost of  
22 going through the permit. Generally, most of these  
23 permits are general permits anyway.

24           So, the appeal point really comes at the

1 designation, not necessarily after the permit is  
2 issued. It's a fait accompli, as we said in our --  
3 in our filing by the time that decision is made.

4 MS. WILLIAMS: I would like -- do you have  
5 anymore follow-up?

6 HEARING OFFICER: No, please go ahead,  
7 Ms. Williams.

8 MS. WILLIAMS: I have a couple of  
9 follow-ups. One, I may have misunderstood,  
10 Ms. Manning, your testimony, but I thought you were  
11 saying that the Agency's determination under the  
12 designation section is different than how it is done  
13 under the federal rule. And we certainly were not  
14 trying to be different, so could you please explain  
15 to us where you see an inconsistency between our  
16 proposal and the federal rule.

17 MS. MANNING: Your rule -- and as a matter  
18 of fact, your rule reads differently than I recall  
19 Mr. Sofat's testimony because Mr. Sofat actually  
20 testified that this goes towards a designation and  
21 he also testified it's only used in enforcement, but  
22 the fact of the matter is the way the rule reads, it  
23 allows the EPA to make a designation that a permit  
24 is required and, therefore, there is no -- there is

1 no ambiguity but that the producer needs to get the  
2 permit and that's how we read the rule.

3 MS. WILLIAMS: Okay. Do you -- I guess a  
4 simple way to ask my question is do you agree that  
5 the federal rule also requires that a designated  
6 CAFO be a significant contributor of pollutants to  
7 waters of the U.S.?

8 MS. MANNING: I agree that the federal  
9 rule allows for a designation process. How Illinois  
10 implements that federal requirement is up to the  
11 State of Illinois.

12 And to bypass the Board in a decision as  
13 to whether a permit is necessary or not necessary  
14 and how these regulations apply in practice on the  
15 question of whether a permit is needed is a misstep,  
16 if I will -- if I would be allowed to say so -- in  
17 the State of Illinois to do that so the Agency makes  
18 the only designation and that's not appealable to  
19 the Board.

20 MS. WILLIAMS: So, let me then ask, is  
21 really what you're saying, our rule mirrors the  
22 federal rule precisely, but it doesn't allow for the  
23 uniqueness of having a Board and an Agency?

24 MS. MANNING: I'm not sure that it mirrors

1 it precisely. It is intending to implement the  
2 federal law in a way that we don't believe is  
3 correct in this state and we're asking that the  
4 Board change that.

5 MS. WILLIAMS: How? How is it not  
6 correct?

7 MS. MANNING: I think I just explained  
8 that.

9 MS. OLSON: How is it different than the  
10 federal rule? How is our rule in 502.106 different  
11 than the federal designation process?

12 MS. MANNING: It doesn't allow for an  
13 understanding of Illinois Law that determines who  
14 makes the designation or how that designation is  
15 made or whether that designation is appealable.

16 MS. WILLIAMS: Have you ever had a  
17 situation where a CAFO has submitted a nutrient  
18 management plan to the Agency -- and I'm talking now  
19 about the enforcement context -- and the Agency has  
20 determined by reviewing that plan that no permit is  
21 required?

22 MS. MANNING: Yes, I've had the situation  
23 where the EPA has determined that no permit is  
24 required and the attorney general's office in the

1 enforcement context requires a permit prior to  
2 settling the matter.

3 MS. WILLIAMS: And I appreciate your  
4 experience or issues you may have had in enforcement  
5 cases, but for purposes of these rules, I'm getting  
6 at whether it's possible that even after the  
7 designation process, the Agency may determine  
8 there's a chance -- there's an opportunity in the  
9 process, as set up in the proposal, for the Agency  
10 to determine, through a review, before a permit is  
11 issued that no permit is actually required.

12 MS. MANNING: That's correct, my  
13 understanding was from Mr. Sofat's testimony that  
14 this rule would largely be used in the enforcement  
15 context.

16 MS. DEXTER: Can I ask a quick follow-up?

17 MS. WILLIAMS: I have one more question  
18 and then I think you can go. There's a statement on  
19 Page 9 of the motion that says, "A finding of permit  
20 applicability sought by the IEPA in its proposed  
21 Section 502.106 is certainly cognizable as a matter  
22 subject to appeal to the Board."

23 And just using that as a foundation for my  
24 question, as you've stated, we are talking about

1 water law here; we're not talking about land or air.

2 MS. MANNING: Thank you.

3 MS. WILLIAMS: I'm not sure I agree with  
4 your earlier testimony that we always know that we  
5 need a permit. I think the Agency tells people  
6 every day whether we think they need a permit or  
7 not.

8 Would you say that in any situation where  
9 the Agency tells a facility, "We think you need a  
10 permit," that that statement/decision/determination  
11 should be a final decision appealable to the  
12 Pollution Control Board?

13 MS. MANNING: I don't think that's the  
14 situation we're dealing with here. I think the  
15 situation we're dealing with here is you're asking  
16 the Board to make a board rule that allows you to  
17 make a designation that requires an industry to do  
18 something, a business to do something that it  
19 believes is not required.

20 MS. WILLIAMS: To answer my question, I  
21 guess are you saying that, no, you wouldn't  
22 certainly think that the Board should always hear  
23 appeals every time the Agency tells someone they  
24 think --



1 MS. MANNING: That's correct, that's  
2 correct.

3 MS. WILLIAMS: Okay. Thank you. That's  
4 all.

5 MS. DEXTER: I have just one follow-up in  
6 the response to your statement that the problem  
7 seems to be that CAFOs are entering into settlement  
8 agreements with the AG's office for enforcement  
9 action and that requires a permit.

10 How does the agency determination even  
11 factor into that settlement and the problem with the  
12 enforcement settlements? Because the Agency, under  
13 the scenario you described as being the problem, the  
14 Agency isn't making a determination; it's part of  
15 the agreement that you're reaching with the AG's  
16 office.

17 MS. MANNING: And the way this likely will  
18 play out is the Agency's declaration or designation  
19 will segue with that enforcement process and,  
20 in fact, that's how I understood Mr. Sofat's  
21 testimony, that this would really -- this  
22 designation would really only be used in the  
23 enforcement context.

24 So, I think it's naive to think that these

1 two won't go hand in hand in terms of an enforcement  
2 where the applicant/would-be applicant -- or  
3 non-applicant because they don't believe there's a  
4 discharge -- will be forced to file for a permit  
5 because the Agency designates it as requiring one.

6 MS. DEXTER: Just one more follow-up. So,  
7 you're saying that you could enter into a settlement  
8 voluntarily with the AG's office, you know, not  
9 going through the entire hearing process, agree in  
10 that settlement, as a condition of that settlement,  
11 to apply for a permit from IEPA. If there's an IEPA  
12 determination along with that, you know, like you  
13 were saying, that kind of goes hand in hand; there  
14 might be a determination; you could then appeal the  
15 Agency's determination in contrary to the settlement  
16 that you had reached with the AG's office?

17 MS. MANNING: No, that's not what I'm  
18 saying at all. A person can settle or not settle.  
19 The dynamics of that are different. But let's  
20 take -- while Mr. Sofat testified that that's --  
21 their intention is to do this during the enforcement  
22 context, the fact of the matter is the way the rule  
23 reads, it can be used at any time.

24 So, the objection we have is that the

1 Agency unilaterally makes a designation saying  
2 someone needs a permit. And clearly, you know, the  
3 producer can do whatever it wants to do in the  
4 context of a settlement and they can make an  
5 agreement, and you're right about that, but the fact  
6 of the matter is, the way this rule reads is the  
7 Agency is asking the Board to develop a rule that  
8 I've not seen in the environmental context ever  
9 before in my entire career in environmental law,  
10 which spans for some time, where the EPA gets to  
11 make a decision that something is required that's a  
12 permit that is not appealable to the Board, so.

13 MS. DEXTER: And just to focus in on that,  
14 I think Debbie was getting at this a little bit, but  
15 is the Agency required to issue a permit for every  
16 facility that applies for a permit?

17 MS. MANNING: No, but if somebody applied  
18 for a permit, they obviously want a permit.

19 MS. DEXTER: But in the situation where  
20 the Agency -- the Agency may need more data to  
21 make -- to under -- to actually say, "We think you  
22 need a permit."

23 MS. MANNING: Let me back up again because  
24 I think maybe I can explain the disconnect here a

1 little bit different.

2 In the permit context relevant to CAFOs,  
3 you've got a different kind of scenario than you  
4 might have in a regular kind of scenario because  
5 you've got a permit only be required under federal  
6 law with Waterkeeper's and National Pork if there  
7 is, in fact, a discharge. But what is that permit?  
8 That permit is to not have you discharge anyway.

9 So, that's I think the disconnect that we  
10 have in this kind of rule-making, that the fact of  
11 the matter is if a producer is not discharging, is  
12 not designed to discharge, is not proposing to  
13 discharge, does not have the propensity to discharge  
14 and his engineers tell him you've contained -- with  
15 these operational controls and these management  
16 controls, I believe that you've contained your  
17 manure to such an extent in your other things on  
18 your facility to such an extent that there will be  
19 no discharge, there is no permit required, so for  
20 the Agency to say, "We disagree with that; we need  
21 you to have a permit," and that decision is not  
22 aired before the Board, it seems to me that that  
23 does a disservice to the environmental process that  
24 we have under the Environmental Protection Act,

1 which is a two-step checks and balances in terms of  
2 these kinds of decisions.

3 MS. KNOWLES: I would like permission to  
4 make a comment since we seem to be taking oral  
5 argument today.

6 HEARING OFFICER: Ms. Manning is a sworn  
7 witness. She's been sworn in to provide testimony.  
8 If you have a question to follow up on that, please  
9 go ahead, Ms. Knowles.

10 MS. KNOWLES: I don't. I still would seek  
11 permission to make a comment before we close that  
12 addresses this issue.

13 HEARING OFFICER: We can turn to that when  
14 we're prepared to close. Any follow-up questions  
15 additionally for Ms. Manning?

16 MS. WILLIAMS: I just have one on the  
17 last -- are you done with your -- did you ask all  
18 the Board's questions?

19 HEARING OFFICER: I am done, yes.

20 MS. WILLIAMS: Okay. Well, then I do have  
21 one final follow-up on -- I thought Dr. Funk was  
22 very helpful this morning on management plans and  
23 the LMFA and all of that.

24 I just had one wording question for you

1 about the proposal and the cross references that you  
2 included. Okay, I have it in front of me now. In  
3 one of the sections -- for example, in the first --  
4 the proposal does not -- it has two references to  
5 LMFA requirements and it's -- the references are  
6 different in the two subsections, so --

7 MS. MANNING: I'm lost, Ms. Williams.

8 MS. WILLIAMS: Okay. I'm looking at  
9 Page 11 of your proposal --

10 MS. MANNING: Thank you.

11 MS. WILLIAMS: -- Section 502.102. The  
12 producers are proposing replacing the Agency's  
13 requirements that unpermitted large CAFOs follow  
14 Section 502.510(b).

15 MS. MANNING: Uh-huh.

16 MS. WILLIAMS: And you are replacing that  
17 with, in one instance, a citation to 510 ILCS 20(f)  
18 and 8 Illinois Administrative Code 900.803. In one  
19 place, there's that. And then in another place,  
20 it's just 8 Illinois Administrative Code Part 900,  
21 Subpart H. Can you just explain --

22 MS. MANNING: Actually, what I would --

23 MS. WILLIAMS: -- to the Board the  
24 reasoning for the different references.

1 MS. MANNING: Actually, what I would  
2 rather do in the interest of time is look at this  
3 again in light of Dr. Funk's testimony and we will  
4 perfect this section to provide a more specific  
5 proposal to the Board in terms of what we believe  
6 needs to be changed consistent with Dr. Funk's  
7 testimony.

8 MS. WILLIAMS: Okay. I don't have any --

9 HEARING OFFICER: Ms. Williams, it sounds  
10 like it would be satisfactory to you to have an  
11 opportunity to review a written revised proposal of  
12 this nature.

13 MS. MANNING: And I would also suggest  
14 that in the context of rule-making before the Board,  
15 it's always been my understanding that we make a  
16 proposal, but the Board may make changes to that and  
17 ask questions of that and I was a bit surprised that  
18 the Agency has not provided comment on what kinds of  
19 proposals that we made in terms of -- so,  
20 in other words, this is a living, breathing process  
21 and our intention is to make that so and not to be  
22 so prescriptive or stilted in our questions and our  
23 answers that the Board doesn't have a really good  
24 flavor for what the issues are.

1           We are proposing issues and changing  
2       certain language. Are there -- might there be a  
3       better way of writing that based on what we propose  
4       to you? There might be, and the Board might decide  
5       that. And it's certainly up to the Board, in my  
6       perspective, for the Board to make that  
7       determination.

8           HEARING OFFICER: And the Board, on the  
9       record, did pose questions specifically to the  
10      Agency with regard to the substance of the motion to  
11      amend. I certainly want you to be aware of that,  
12      Ms. Manning. And the Agency is quite clear in  
13      indicating that at or even before the final hearing  
14      in Jo Daviess County that they would in part, I  
15      suspect, rely on testimony --

16           MS. MANNING: Good.

17           HEARING OFFICER: -- such as we had here  
18      today to respond to that, so I mention that not to  
19      advocate for the Agency but simply to add some flesh  
20      to the skeleton, the point that you want to make.

21           MS. MANNING: Good, because I think we  
22      will all get ahead more -- will be more forward  
23      thinking and more ahead with that kind of process  
24      than -- thank you.



1 HEARING OFFICER: Very good. Were there  
2 any further follow-up questions for Ms. Manning on  
3 her testimony today?

4 (There was no response.)

5 HEARING OFFICER: Neither seeing nor  
6 hearing any, I believe our procedural course is  
7 clear and that we don't need to go off the record to  
8 address that.

9 Let me quickly note for the record that  
10 our sheet on which people could indicate a  
11 willingness to -- an interest in testifying in spite  
12 of not having pre-filed testimony is still blank, so  
13 we have no additional witnesses to address today,  
14 and there have been no additions to the list of  
15 persons wishing to comment beyond those who did  
16 offer a public comment earlier today, so we have  
17 disposed of those with the exception of Ms. Knowles,  
18 who has expressed an interest in offering a public  
19 comment, which I would like to get to Ms. Knowles in  
20 just a moment.

21 I do want quickly to address the issue of  
22 the economic impact statement. This will take only  
23 a moment. Under Section 27(b) of the Environmental  
24 Protection Act, the Board must request the

1 Department of Commerce and Economic Opportunity, or  
2 DCEO, conduct an economic study -- an economic  
3 impact study of proposed rules before the Board  
4 adopts them. The Board then must make either the  
5 results of that study or the department's  
6 explanation for not conducting one available to the  
7 public at least 20 days before a public hearing.

8 In a letter dated March 22nd, 2012, our  
9 chairman, Tom Holbrook, did request the DCEO conduct  
10 such a study of this specific rule-making proposal  
11 and requested a response no later than May 1st of  
12 2012. However, the Board has received no such  
13 response.

14 Is there anyone who would like to testify  
15 regarding the Board's request for a study and DCEO's  
16 response to that request?

17 (There was no response.)

18 HEARING OFFICER: Neither seeing nor  
19 hearing any, let's move ahead. It is expected that  
20 copies of this transcript will be available within  
21 eight business days, by approximately November 2nd  
22 of 2012.

23 Once it is filed with the Board, please be  
24 assured that that transcript will be posted as

1 quickly as possible to the Board's website so that  
2 it can be available to all of you to review, to copy  
3 and to print.

4 The fourth hearing will take place as  
5 scheduled on Tuesday, October 30th, 2012, which is  
6 of course one week from today. That is in De Kalb.  
7 As I noted for the record, the pre-filed testimony  
8 of three witnesses on the part of the Environmental  
9 Coalition and the fourth witness, whose name I must  
10 confess I do not recall immediately, are in the  
11 record and were timely filed, so we will have that  
12 hearing to address the pre-filed testimony that I've  
13 just described.

14 Also, I do want to note that in a hearing  
15 officer order dated April 24th of 2012, there was an  
16 additional fifth hearing scheduled in Jo Daviess  
17 County, which will take place on Wednesday,  
18 November 15th, and the deadline to pre-file  
19 testimony for that hearing will pass on Wednesday,  
20 October 31st of 2012.

21 I do want to ask that if you are filing  
22 with the Board, whether paper, on paper or  
23 electronically, to serve those on the Hearing  
24 Officer and to those persons on the service list.

1           We have strived to maintain an accurate  
2           service list and you can easily check with our Clerk  
3           to confirm that you have a current and correct  
4           version of it. Now, I want to turn -- are there any  
5           procedural questions?

6           MS. WILLIAMS: Just one quick procedural  
7           question.

8           HEARING OFFICER: Yes?

9           MS. WILLIAMS: The Agency obviously has  
10          indicated that we will try to respond on the -- at  
11          the Jo Daviess. I'm not sure if the pre-filing  
12          deadline will provide enough time for us to compile  
13          all the answers that would require policy  
14          application. Would the Hearing Officer rather --  
15          how would you prefer we handle our responses?

16          HEARING OFFICER: I would start by urging  
17          you to request that the review process at the Agency  
18          take place as quickly as possible, recognizing that  
19          there are some difficult legal --

20          MS. WILLIAMS: We're going to be in  
21          De Kalb, so we're not going -- that kind of really  
22          means us filing like Friday kind of for us to --

23          HEARING OFFICER: And I'm not blind to  
24          that, but as I have indicated, the Board has not

1 intended to schedule an additional hearing and would  
2 like to proceed with the first notice at the  
3 conclusion of the comment period as quickly as  
4 possible.

5 With that urging on behalf of the Board  
6 that you make every effort to do it as quickly as  
7 possible, I think that to the extent you can respond  
8 to those questions with a policy answer at the  
9 pre-filing deadline, that would be very helpful.

10 If testimony accurately supplements that  
11 and there is an opportunity for people to follow up  
12 with questions, we can use that time I think  
13 efficiently and productively as well. Does that  
14 make sense?

15 MS. WILLIAMS: Yes.

16 HEARING OFFICER: Very good. Any further  
17 procedural questions?

18 (There was no response.)

19 HEARING OFFICER: Ms. Knowles, you had  
20 indicated that you had wished to offer a public  
21 comment. Am I correct that you still wish to do  
22 that?

23 MS. KNOWLES: No, I'm going to pass.  
24 Thank you.

1 HEARING OFFICER: Very good, very good. I  
2 think that leaves us with nothing else on our  
3 agenda, unless there is a question that anyone  
4 wished to raise.

5 (There was no response.)

6 HEARING OFFICER: We are adjourned.  
7 Thank you for your patience and we will see you in  
8 one week.

9 (The proceedings concluded at 2:33 p.m.)

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1 STATE OF ILLINOIS )  
2 )  
3 COUNTY OF CHAMPAIGN )

4 I, Jill Nicole Stevens, a freelance court  
5 reporter for the State of Illinois, do hereby  
6 certify that I reported in machine shorthand the  
7 hearing before the Illinois Pollution Control Board  
8 held on October 23, 2012, at 10:00 a.m., at the  
9 Brookens Administrative Center, Lyle Shields County  
10 Board Meeting Room, 1776 East Washington Street,  
11 Urbana, Illinois; that I thereafter caused the  
12 foregoing to be transcribed into computer-aided  
13 transcription, which I hereby certify to be a true  
14 and accurate transcript of the same.

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Dated this 27th day of October, 2012.

  
\_\_\_\_\_  
Freelance Court Reporter

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