

MANITOBA CLEAN ENVIRONMENT COMMISSION

HOG PRODUCTION INDUSTRY REVIEW

TRANSCRIPT OF PROCEEDINGS

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Held at the Keystone Centre

Brandon, Manitoba

WEDNESDAY, APRIL 18, 2007

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APPEARANCES:

## Clean Environment Commission:

Mr. Terry Sargeant	Chairman
Mr. Edwin Yee	Member
Mr. Wayne Motheral	Member
Ms. Cathy Johnson	Commission Secretary
Mr. Doug Smith	Report Writer

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NO EXHIBITS MARKED

1 WEDNESDAY, APRIL 18, 2007

2 UPON COMMENCING AT 1:15 P.M.

3 THE CHAIRMAN: Good afternoon, ladies  
4 and gentlemen. Welcome to the Clean Environment  
5 Commission hearings into our Hog Production  
6 Review.

7 I'm sorry about the late start, but  
8 we've had some technical computer problems.

9 My name is Terry Sargeant. I'm the  
10 Chair of the Manitoba Clean Environment  
11 Commission, and I'm also the chair of this panel.  
12 With me on the panel are Wayne Motheral and Edwin  
13 Yee. I have a few opening comments, and then we  
14 will proceed to presentations by a number of  
15 people this afternoon. The Clean Environment  
16 Commission has been requested by the Minister of  
17 Conservation to conduct an investigation into the  
18 environmental sustainability of hog production in  
19 this Manitoba. The Terms of Reference from the  
20 Minister direct us to review the current  
21 environmental protection measures in place to  
22 determine whether or not they are effective for  
23 the purpose of managing the industry in a  
24 sustainable manner.

25 Our investigation is to include a

1 public component to gain advice and feedback from  
2 Manitobans. This is to be done by way of public  
3 meetings in various regions of the province.

4 We have been asked, as well, to take  
5 into account efforts underway in other  
6 jurisdictions to manage hog production in those  
7 jurisdictions in a sustainable manner.

8 Further, we are to review the contents  
9 of the report prepared by Manitoba Conservation  
10 entitled: "An Examination of the Environmental  
11 Sustainability of the Hog Industry in Manitoba."

12 At the end of our investigation, we  
13 will consider various options and make  
14 recommendations to the Minister on any  
15 improvements that may be necessary to provide for  
16 environmental sustainability of hog production in  
17 our Province.

18 To ensure that our review includes  
19 issues of importance to all Manitobans, the panel  
20 has undertaken to hold 17 days of meetings in 14  
21 communities throughout the agricultural part of  
22 Manitoba. Today, I believe, is day 14, I think,  
23 of these hearings. We have one more day here and  
24 then two next week. We started the hearings in  
25 early March. And the final meetings is scheduled

1 for Winnipeg next Friday, the 27th.

2 At these hearings, it is open to any  
3 groups, or individuals, to make a presentation to  
4 this panel on issues related to hog production in  
5 the province. For the most part, presentations  
6 are to be limited to 15 minutes. Exceptions may  
7 be made, in cases where a presenter needs more  
8 time, provided that presenter has asked, prior to  
9 the meeting, for additional time. All presenters  
10 will be asked to take an oath promising to tell  
11 the truth.

12 Presentations should be relative --  
13 pardon me, relevant to the mandate given to the  
14 Commission by the Minister, and to the issues  
15 described in the Guide to Public Participation in  
16 this Review.

17 Members of the panel may ask questions  
18 of any presenter during or after the presentation.  
19 There will be no opportunity for other presenters  
20 to question or cross-examine presenters. In  
21 addition to these public meetings, the CEC is  
22 engaging consultants to assist us in the review.  
23 The results of those research endeavours will be  
24 posted on our website upon receipt. For the most  
25 part, we anticipate receiving those in late June.

1 Parties, individuals or organizations will be  
2 invited to provide comment on any of those  
3 reports, if they so wish. A reasonable, albeit  
4 brief period of time, will be allowed for this  
5 comment.

6 Written submissions will also be  
7 accepted. Information as to how to submit a  
8 written submission is available on our website.  
9 The deadline for such submissions is May 7th.

10 As well, we realize that many people  
11 are reluctant to make presentations in public, for  
12 a variety of reasons. To address that, we have  
13 engaged a graduate student from the University of  
14 Manitoba to meet with, or talk on the phone with,  
15 people who would rather not speak at a public  
16 meeting. These conversations, whether they be  
17 meetings or on the telephone, will be kept  
18 confidential. Information as to how to contact  
19 this person is available on our website, as well  
20 as at the table by the entry door.

21 Some administrative matters. We  
22 actually have a full slate. So if you had wished  
23 to make a presentation, you are out of luck today.  
24 There may be a slot or two open tomorrow, but I'm  
25 not certain. You would have to check with the

1 table by the entrance.

2 Also, as is our normal practice, we  
3 are recording these sessions. Transcripts will be  
4 available in a day or so online. The links can be  
5 found at our website.

6 Finally, in respect of cell phones, I  
7 would ask that they be turned off or that the ring  
8 tone be turned off. If you must take a call, I  
9 would ask that you please leave the room.

10 As well, I would ask that you not  
11 engage in any conversations while people are  
12 making presentations. Thank you. As I noted, we  
13 have a full slate this afternoon. First up is  
14 Mr. Bruce Dalgarno. Would you please state your  
15 name for the record?

16 MR. DALGARNO: Bruce Dalgarno.  
17 BRUCE DALGARNO, having been sworn, presents as  
18 follows:

19 THE CHAIRMAN: Go ahead, sir.

20 MR. DALGARNO: Thank you,  
21 Mr. Commissioner. I certainly appreciate this  
22 opportunity by the Clean Environment Commission to  
23 allow us to make this presentation. As I said, my  
24 name is Bruce Dalgarno. My wife, Carol and I,  
25 together with our son, Andrew, farm at Newdale,

1 Manitoba. We grow oats, barley, canola, winter  
2 wheat, spring wheat and perennial rye grass.

3 And just for clarification, we do not  
4 own any hogs, nor do we own any other livestock,  
5 nor do we have any investment in any livestock  
6 facilities.

7 I think that this moratorium that was  
8 put on to the hog industry was a bad decision by  
9 the government of the day. I think that actions  
10 like this should only be based on good science to  
11 have any credibility. And because if they aren't  
12 based on good science, then you really have  
13 nothing to substantiate your claim. And this  
14 moratorium that was put on the hog industry was  
15 not based on good science.

16 We farm beside a 2,500 sow farrowing  
17 barn, and I can honestly say that we have never  
18 had any problems with it. We actually farm on  
19 three of the four sides of this particular barn.  
20 Approximately two years ago, we had the  
21 opportunity to receive some of the manure from the  
22 barn as a form of fertilizer on one of our fields.  
23 The barn operators filed the appropriate Manure  
24 Management Plan with the province. And this plan  
25 was developed with my input regarding the

1 cropping -- the crop that was going to be grown on  
2 that field the next year. The fertilizer from  
3 this hog barn is a naturally-occurring product,  
4 which means that the farmers who use it don't have  
5 to apply chemical fertilizers to their field  
6 crops. Assuming 80 pounds of nitrogen, it could  
7 be worth approximately \$40 per acre for the  
8 nitrogen, another \$8 to \$10 an acre for the  
9 phosphorous, as well as values of micro-nutrients  
10 added besides that. So overall, this manure  
11 applied to my crop, or anyone else's crop, could  
12 easily be worth \$50 to \$60 per acre of nutrients  
13 to our crop.

14 As well, the hog barns in the area  
15 also use feed grains. And the feed mills may be  
16 located in Winnipeg, Brandon, Souris, or any other  
17 number of spots throughout the province. But the  
18 grain, the wheat, the barley that comes to those  
19 feed mills comes from a farm somewhere. And it  
20 certainly has a value to the other farmers, the  
21 field crop farmers, in Manitoba.

22 Also, my experience has been that the  
23 local hog barn also enhances our municipality  
24 considerably in that they pay a considerable  
25 amount of property taxes. And they also, in our

1 instance, in the barn close to us, they also  
2 employ 12 local people to work in the barn.

3 So as I said, I think this moratorium  
4 was not based on good science. And that bothers  
5 me as a crop farmer, because I think every crop  
6 farmer should be -- could be, rather, affected.  
7 If the government decided to put a moratorium on  
8 pesticides, for example, while a similar review  
9 was done on a whim.

10 Good rules already exist and they are  
11 followed. Plans have to be filed every year, and  
12 they are. Any action like this, taken by the  
13 government, should only be done based on good  
14 science relative to Manitoba. I consider this  
15 decision to be not based on good science and not  
16 good for agriculture in Manitoba.

17 Thank you, Mr. Sargeant.

18 THE CHAIRMAN: Thank you very much,  
19 Mr. Dalgarno. I would hope -- and, ultimately,  
20 that's part of our task in this review, but I  
21 would hope that the government didn't implement  
22 this moratorium based simply on a whim. And, you  
23 know, part of our task is to determine the science  
24 around these issues.

25 Wayne, do you have questions?

1                   MR. MOTHERAL: Yes, I do, thank you,  
2 Mr. Chairman. Mr. Dalgarno, some of my questions,  
3 a few of them may not be directed to you  
4 personally, but may be about the knowledge of this  
5 hog barn that you are talking about. How long has  
6 that barn been there?

7                   MR. DALGARNO: Oh, I would say  
8 probably five years perhaps, six years. Five  
9 years maybe.

10                  MR. MOTHERAL: And when the barn --  
11 before the barn was developed, of course, there  
12 would have to be a permit or a development permit  
13 allowed from the Municipality, and I believe  
14 that's Harrison; is that not?

15                  MR. DALGARNO: Strathclair.

16                  MR. MOTHERAL: Oh, I see. So it's  
17 close. And was there a public meeting on any  
18 conditional uses?

19                  MR. DALGARNO: Yes.

20                  MR. MOTHERAL: There was, okay. You  
21 say you received some of the manure fertilizer  
22 from this operation. Do you receive it at no  
23 charge?

24                  MR. DALGARNO: That's correct.

25                  MR. MOTHERAL: Would you be -- this is

1 putting a question to you that you haven't thought  
2 about yet, but would you pay for that? You know,  
3 if there was an opportunity, if there is a value  
4 to it, would you pay for it?

5 MR. DALGARNO: Well, I think,  
6 Mr. Motheral, that's a very good question.  
7 Because, really, I think that there is  
8 considerable value to it. And I wouldn't have a  
9 problem paying a certain percentage to it,  
10 providing, I guess, there is some caveats to that.  
11 You know, there would have to be some continuity.  
12 You would have to be able to plan a crop rotation  
13 to utilize the nutrients that are being put on  
14 there and have, I guess, some continuity year to  
15 year. So, number one, I would know that I can  
16 plan my crop rotation accordingly.

17 But also the hog barn operator would  
18 know what land he has available to put his manure  
19 on, on a yearly basis. And, you know, not just  
20 year by year, but into the future. So I would  
21 think that each barn would be a separate issue, as  
22 far as having someone pay or not pay, or how it's  
23 applied and all of that sort of thing. But I  
24 wouldn't put that as a no. I would certainly look  
25 at that question.

1 MR. MOTHERAL: Okay. And just one  
2 more question. You say:

3 "Good rules already exist and are  
4 followed."

5 Do you think the present regulations put on these  
6 operations are sufficient?

7 MR. DALGARNO: Relating to the Manure  
8 Management Plans?

9 MR. MOTHERAL: Well, relating to the  
10 whole hog industry?

11 MR. DALGARNO: From our experience,  
12 yes, I would believe so.

13 MR. MOTHERAL: Okay, that's all I've  
14 got. Thank you.

15 THE CHAIRMAN: Edwin?

16 MR. YEE: Yes, thank you,  
17 Mr. Chairman. Yes, Mr. Dalgarno, how many acres  
18 do you farm?

19 MR. DALGARNO: Approximately  
20 3,000-acres of crop.

21 MR. YEE: And how much of the acreage  
22 do you use for manure fertilizer?

23 MR. DALGARNO: I believe it is about  
24 210 acres.

25 MR. YEE: So for the remainder, you

1 have to supplement using chemical fertilizers?

2 MR. DALGARNO: That's correct.

3 MR. YEE: Thank you. That's all the  
4 questions I have.

5 THE CHAIRMAN: Have you had this  
6 manure fertilizer more than one year or was it  
7 just the one year?

8 MR. DALGARNO: No, just once.

9 THE CHAIRMAN: And is there any chance  
10 of getting more in the future or is that  
11 speculative?

12 MR. DALGARNO: Well, I would think  
13 that's probably speculative to a certain extent.  
14 The barn has changed hands in the last year or  
15 two. So we will see what the new owners have to  
16 say, or deal with them, yeah.

17 THE CHAIRMAN: Thank you very much,  
18 Mr. Dalgarno. Thanks for coming out this  
19 afternoon.

20 MR. DALGARNO: Thank you.

21 THE CHAIRMAN: Next is Ruth Pryzner.  
22 And I should note that Ms. Pryzner has requested  
23 an hour presentation, and that was agreed to some  
24 time ago.

25 Ms. Pryzner, I believe that you took

1 the oath to tell the truth at the Winnipeg meeting  
2 about a month and a half ago, and so we would  
3 consider that to still be in effect. Would you,  
4 just for the record, please, introduce yourself  
5 again?

6 MS. PRYZNER: My name is Ruth Pryzner.  
7 I'm a farmer who lives between Alexander and  
8 Rivers, Manitoba, northwest of Brandon.

9 I have got a lot of things to say here  
10 because this whole question of sustainability of  
11 the hog industry is relatively complex. But, by  
12 the end of the day, it will actually end up being  
13 relatively simple.

14 You know, as a farmer, and as a rural  
15 resident, I have carried on my own business years  
16 ago, just doing my own thing, looking after my  
17 family, looking after the farm. And one day I got  
18 a phone call that there was a proposal to change  
19 the by-laws in the R.M. of Daly to provide for a  
20 conditional use. There was a hog operation, Elite  
21 Swine Operation, that was proposing to set up in  
22 the R.M.

23 And at that time, you know, I really  
24 didn't know what to expect. I didn't even really  
25 know what the problem was. And so I attended to

1 the conditional use by-law process and was  
2 relatively satisfied with the kinds of by-laws  
3 that the R.M. of Daly put in place. They were  
4 fairly general, gave the council a lot of  
5 discretion. It seemed like it wasn't a bad idea.  
6 And then I sat in on the Elite Swine application  
7 and listened to what the proponents had to say and  
8 thought, geez, I wonder what's the problem with  
9 this? It sounds really good.

10 But the people who lived in the  
11 community were quite upset. And they started  
12 identifying a bunch of concerns about the whole  
13 question of having the barn move in next door.  
14 And I have heard those concerns expressed over and  
15 over and over and over again by communities since.  
16 My eyes started opening about what was actually  
17 happening with this industry.

18 So in 2000, we ended up -- there was  
19 another proposal in the R.M. of Daly, and I got a  
20 phone call about that. And that's when I really  
21 started to learn about what was involved with this  
22 industry.

23 The first thing that I really want to  
24 talk about is the whole question of the new  
25 Planning Act in the Manitoba Pork Council's

1 presentation. They have made some reference to it  
2 and some suggestions for changes and direction  
3 that they hoped the Commission would take.

4           And the reason why I think it's  
5 important to talk about the Planning Act, in some  
6 detail or length, is that the reality is that the  
7 structure of decision-making processes often  
8 informs the outcomes. And, in fact, sometimes the  
9 structure drives the outcomes.

10           So when we're talking about the  
11 ability of how this whole industry fits in, and  
12 how environmental protection can be achieved in  
13 the context of the process, it becomes quite  
14 important. Prior to the passage of Bill 33, the  
15 Planning Act, municipal authority to pass by-laws  
16 to protect the general welfare of persons within  
17 the municipality was available under Sections 231,  
18 232 and 233 of the Municipal Act. In fact, the  
19 Manitoba Court of Appeal confirmed, in a decision  
20 between 4500911 Manitoba Ltd. in the R.M. of  
21 Stuartburn, that the R.M. of Stuartburn had the  
22 ability to use these regulations to limit  
23 livestock applications in the absence of a planned  
24 zoning by-law, as well as during the process of  
25 their creation.

1           The court found that:

2           "It would be astonishing if a  
3           municipality could not establish these  
4           kinds of operations with respect to  
5           intensive livestock operations in the  
6           absence of the development plan and a  
7           comprehensive zoning by-law.

8           It would be surprising if the  
9           municipality lacked the power to  
10          prohibit the development of an  
11          intensive livestock operation within  
12          boundaries of the four villages within  
13          the municipality",

14         the judgment reads.

15                 Why would the Provincial Government  
16         respond to the principles in this decision? It  
17         enacted Bill 33, which stripped municipal  
18         governments of this authority. The Planning Act  
19         specifically removes the ability of municipalities  
20         to use these sections of the Municipal Act to  
21         address issues of safety, health protection, and  
22         well-being of people, and the protection of  
23         property in relation to Intensive Livestock  
24         Operations. It also strips their ability to  
25         regulate anything to do with manure.

1                   The Planning Act enshrines the  
2   jurisdictional separation recommended by the  
3   Finding Common Ground report, where the province  
4   is responsible for environmental matters and  
5   municipalities are reduced to dealing with land  
6   issues.

7                   This has set the stage for the public  
8   interest to be subsumed under the private  
9   interest. Here, the ability for members of the  
10  public to take an active and effective role in  
11  protecting the environment and water, the  
12  lifeblood of the earth, and our health, our home  
13  environments, the ability to define and shape our  
14  communities and our childrens' futures was  
15  significantly diminished.

16                  You have heard from the Manitoba Pork  
17  Council that they are unhappy about the  
18  possibility under the Planning Act for a proposal  
19  to be rejected by council, and that there is no  
20  appeal available. Peter Mah, on behalf of the  
21  Manitoba Pork Council, complained about this at  
22  the Bill 33 Committee Hearings. He also argued  
23  that public participation in the conditional use  
24  process should be restricted to only those people  
25  who lived within a two kilometre radius of a

1 proposed hog operation.

2 Now, the Pork Council is asking you to  
3 recommend that the government revisit this issue.  
4 What they want is this: Once siting and set-back  
5 distances are established, once the zones are  
6 identified, and operation size is determined in  
7 these zones, the industry then has the right to  
8 develop hog barns without any further public input  
9 or other impediments. They want these to become  
10 free fire zones for ILO development.

11 What they are asking for is a system  
12 that renders public participation totally  
13 meaningless, where councils rely on the Technical  
14 Review Committee's assessment and direction,  
15 rather than the people's, for decisions. In  
16 effect, the Manitoba Pork Council is asking that  
17 the province, through the Technical Review  
18 Committees, shepherd the industry's future,  
19 expansion and regulation. There is a multitude of  
20 problems that will arise if you accept the Pork  
21 Council's direction in this regard. In essence,  
22 people will be defenceless.

23 I want to talk now a bit about the  
24 meaning of conditional use. The underlying  
25 principle in the concept of conditional use is

1 that a proposed development is not compatible with  
2 the area in which it proposes to locate. In order  
3 for a development to proceed, the developer must  
4 provide proof that the development can, indeed, be  
5 made compatible to the area. In the case of hog  
6 operations, the proponent is required to prove  
7 that the operation will not create a risk to  
8 health, safety, or the environment, or that risk  
9 can be minimized through the use of appropriate  
10 practices, measures and safeguards.

11 I agree with the previous speaker that  
12 decisions must be science based, but the science  
13 has to be provided by the proponent. It's the  
14 proponent that has to prove that it is safe. The  
15 way the process works now is that that's been  
16 reversed, and it's up to the public to show that  
17 it isn't.

18 Under the former Planning Act,  
19 municipal councils had the ability to impose  
20 whatever conditions they deem necessary to ensure  
21 that risks to the community were mitigated. But,  
22 more importantly, councils had the ability under  
23 53(7) and 53(8) to implement the preventive  
24 principle.

25 This power was extinguished with Bill

1 33, and significant limitations have been placed  
2 on the types of conditions the council may impose  
3 on a permit approval. Any conditions must be  
4 relevant and reasonable. And if you look at the  
5 logic and the structure of the Planning Act, it is  
6 clear that the determiner of relevance and  
7 reasonableness of the conditions is the Technical  
8 Review Committee.

9           The requirements of Section A and C of  
10 116(1) are determined upfront. And these  
11 conditions talk about, you know, compatibility  
12 with the general nature of the surrounding area,  
13 and consistency with development plans, zoning  
14 by-laws, and any secondary plan. This is  
15 relatively easy to establish in the  
16 decision-making process, but it is also part of  
17 the Technical Review Committee's role.

18 But who determines (B), which is:

19           "It will not be detrimental to the  
20 health or general welfare of the  
21 people living or working in the  
22 surrounding area or negatively affect  
23 other properties or potential  
24 development of the surrounding area."

25           Has this been left to the sole

1 discretion of the Board, Council or Commission?  
2 No. The legislation assumes that it is the  
3 expertise of the members of the Technical Review  
4 Committee that will determine the level of risk  
5 and mitigative strategies to address those risks.

6 By the way, why exactly was the word  
7 "preventive" used instead of "minimized" when  
8 discussing risk here? Moreover, how, in this  
9 structure, is the local knowledge imparted to the  
10 decision-makers, through the public hearing  
11 process, ever to be deemed at par with the  
12 determination of the experts on the Technical  
13 Review Committee?

14 The province believes that the T.R.C.  
15 report and recommendations will almost always  
16 prevail in local decisions. And, indeed, that has  
17 been my experience, and the experience of others  
18 who have shared their stories with me over the  
19 years. But there is no legislative space for  
20 public participation in assessment done by  
21 Technical Review Committees. It's a closed  
22 affair.

23 Technical Review Committees do not  
24 verify the information they receive from  
25 proponents. They do not revisit their findings

1 and recommendations after reports are issued, even  
2 when the public points out fundamental errors of  
3 commission or omission in their work, as with the  
4 existence of a municipal drain omitted in the  
5 Technical Review Committee report in the Turtle  
6 Mountain case that people have talked about  
7 before.

8           There are countless examples of  
9 citizens bringing critical details to the  
10 attention of decision-makers that the Technical  
11 Review Committee has failed to identify and  
12 seriously consider. You've heard evidence of this  
13 already by others, having read the transcripts.

14           I will share one other example with  
15 you. In the R.M. of Daly, the Keystone Picket  
16 Basket Proposal, the proposal that changed my  
17 life, failed to take into consideration the likely  
18 interaction between the surface and groundwater at  
19 the proposed site and the variability of the  
20 overburden, all of which were known to local  
21 people, including a previous owner of the land.

22           Both Doug Small of DGH Engineering,  
23 and the Technical Review Committee, were made  
24 aware of the water dynamics on the site by local  
25 residents, including a previous owner of the land.

1 But at the conditional use hearing, both  
2 maintained that an earthen manure storage would be  
3 appropriate at the site.

4 Pip v. the R.M. of Brokenhead  
5 established that municipalities do not have to  
6 enforce their by-laws. If this is the case, then  
7 municipal governments are not required to enforce  
8 their conditional use permits.

9 Such is the case in the R.M. of Daly.  
10 There is a situation in the R.M. of Daly where  
11 Deerboine Colony was granted an additional use  
12 permit. I was a member of the council at that  
13 time. After having gone through the whole  
14 process, and listening to the evidence that was  
15 presented at the hearing, I had to vote against  
16 the proposal. But in any case, the proposal was  
17 granted a conditional use permit.

18 Now, word came through the community  
19 that the colony was building its barn. And so  
20 what I did was I asked the council to direct the  
21 CAO to do an investigation and see if that was, in  
22 fact, true. The Chief Administrative Officer came  
23 back to the council and reported that they were  
24 building the barn. Now, the law says that an  
25 operation can't proceed unless all permits and

1 approvals and licences required by the government  
2 are in place.

3 As it turns out, the Deerboine Colony  
4 had not complied with any of the conditions  
5 imposed by the R.M. of Daly, one of which was that  
6 you have to comply with the Planning Act. And  
7 there was one that they just could not comply with  
8 because it was -- dealt with monitoring test  
9 results.

10 So I put forward a resolution at the  
11 council, asking the council or having the council  
12 pull the permit. The council defeated that  
13 resolution and elected, instead, to ask Deerboine  
14 Colony -- they gave them until November 10th to  
15 prove that they were in compliance with the permit  
16 conditions. The Deerboine Colony presented the  
17 council with a report. And they had admittedly,  
18 within the report, not complied with anything.  
19 They were in breach of the Planning Act.

20 And the way the structure of the  
21 legislation works, and the fact that people can't,  
22 under the new Planning Act, take a council, an  
23 approving authority, a minister, anyone to court,  
24 for not enforcing permit conditions, or the law,  
25 nothing has happened. The Deerboine Colony has

1 pretty much finished building their barn. And  
2 they haven't even applied for a permit for an  
3 earthen manure storage yet. And they still  
4 haven't even applied for one, as of about three  
5 weeks ago.

6 So given this feature of the  
7 regulatory framework, how can the public have any  
8 confidence at all that hog production will proceed  
9 in a sustainable manner, when enforcement of the  
10 condition of a conditional use permit is at the  
11 discretion of councils?

12 The reality throughout rural Manitoba  
13 is that enforcement by municipal governments is  
14 not uniform. If a council does not act,  
15 enforcement requires that the public proceed with  
16 litigation, but you don't have access to the  
17 courts.

18 In the Planning Act, this specific  
19 removal of the public's access to the courts is --  
20 was replaced with the ability to take the council  
21 to court under the Municipal Act, but there is a  
22 problem with this section of the Act. And when  
23 this question was raised during the Bill 33  
24 discussions, government officials assured us that  
25 we would still -- the public would still have

1 access under the Municipal Act. However, the  
2 Municipal Act requires that the application to the  
3 court is an attempt to have a decision of council,  
4 either through resolution or by-law, to be  
5 declared invalid on four grounds and four grounds  
6 only. That the council either exceeded its  
7 jurisdiction in making the decision, which that  
8 doesn't apply to an enforcement question. They  
9 acted in bad faith, the by-law was discriminatory,  
10 or the council failed to comply with this Act or  
11 any other Act.

12 In the case of Deerboine, for example,  
13 which one of those grounds would be applicable?  
14 The council had jurisdiction to make the decision.  
15 We're assuming they acted in good faith in making  
16 the decision. There is no question of  
17 discriminatory practices with respect to the  
18 by-law. And the violation of the Act, the  
19 Planning Act, was on the part of the Deerboine  
20 Colony. And so the matter is going to stay as it  
21 is. That's a very serious problem for the public  
22 not being able to be protected from any harm that  
23 may come their way from livestock operations and  
24 hog operations, in particular.

25 Now, what government officials tell us

1 is: Well, you know, you can always throw the  
2 council out at the next election. The concerned  
3 ratepayers in my municipality came close to doing  
4 this in 2002. But the problem is that there is  
5 irreversible consequences or long-term effects  
6 that may or may not be mitigable, and this  
7 nullifies the significance of the electoral  
8 accountability.

9           So the changes that were made in Bill  
10 33 weren't good enough for the Manitoba Pork  
11 Council. They wanted to then, as they want now,  
12 access to an appeal process if the council didn't  
13 approve a permit. They also want councils to be  
14 required to give reasons for denial. This would  
15 give ILO developers evidence with which to take  
16 councils to court for denying an application.

17           The final point here is that even, if  
18 by some miracle, a member of the public is  
19 successful in securing favourable judgment from  
20 the court, all the council is required to do is  
21 re-run the process properly. That is in  
22 accordance with the reasons for judgment, and  
23 re-issue the permit.

24           Given all of this, what are we to take  
25 of the claim of the Manitoba Pork Council that

1 they were subject to the most stringent  
2 regulations in the country? As Lisa Beckett from  
3 Grace has said:

4 "You can have the best regulations in  
5 the world, but if the government is in  
6 bed with the industry, and the  
7 regulations aren't enforced, they are  
8 meaningless."

9 In short, the stated intent of Bill  
10 33, that is to provide certainty for the livestock  
11 industry, has, indeed, been achieved. Once a  
12 development plan, livestock operation policy and  
13 zoning by-law have been enacted, there is little  
14 to no recourse for members of the public who are  
15 negatively affected by this duress.

16 I would like to say a little bit about  
17 the use of set-back separation distances and the  
18 use of conditional use planning. The land use  
19 planning focuses on separation distances. And I  
20 challenge their claim that the separation  
21 distances in the guidelines have provided a  
22 practical framework for hog operations, other than  
23 livestock operations and rural residents to live  
24 and work together in a manner that is  
25 strengthening the rural economy, yet preserving

1 the high quality of lives that rural residents  
2 expect and demand. My experience is quite  
3 different.

4 In 2002, the R.M. and Town of Shoal  
5 Lake organized a tour to the Killarney area, which  
6 was subsequently sponsored by the Pork Council, to  
7 provide citizens with a first-hand look at hog  
8 barns. The tour was in the winter. During the  
9 tour, we passed barns, and the odour immediately  
10 filled the tour bus. The spokesman, Mr. Scott  
11 Arnott, from MAFRI, quickly explained away the  
12 strong odour by stating that the odour was due to  
13 a problem with the ventilation in the barns, and  
14 all that was required was modification of this to  
15 protect the problem.

16 I drove passed the Dutch barn, located  
17 in Blanchard Municipality, in January, just three  
18 months after it began stocking pigs. The  
19 temperature was minus 30 degrees Celsius. The  
20 odour filled the inside of the closed vehicle, and  
21 persisted as I approached the nearest residence  
22 three-quarters of a mile to the northwest of the  
23 barn. There was another residence to the  
24 southeast about a mile and a half away.

25 You will not hear any testimony from

1 the families who live near the Dutch barn. As I  
2 understand it, one family sold their home to the  
3 operation. The other, a multi-generational farm,  
4 moved their home into the Town of Rivers. In so  
5 doing, a gag order was placed on them by the  
6 company, in exchange for the sale and  
7 compensation.

8                   However, before the gag order was  
9 instituted, the members of these families told me  
10 that their children were ill and under the care of  
11 doctors for the most year the barn was in  
12 operation, and that their homes and yards had been  
13 invaded with the stench of hog manure. The odour  
14 was persistent. It was not just a matter of a few  
15 days each year during manure spreading. The kids  
16 were forced to wear clothes that smelled like hog  
17 manure to school.

18                   One of the children, a friend and  
19 classmate of my daughter, spent a weekend at our  
20 home. I could smell the manure on her clothing.  
21 She wept about how she couldn't play outside at  
22 her house anymore, and was really happy to be  
23 visiting our farm, where the air was clean and  
24 odour-free.

25                   There is only one way you can believe

1 the Pork Council's claims about the adequacy of  
2 guideline separation distances. You must take the  
3 position that the R.M. of Daly Council took in  
4 approving a 9,000 head cattle feedlot less than  
5 half a mile, the minimum separation distance  
6 allowed under the plot from a residence. In the  
7 words of the councillor, who explained this  
8 position:

9 "Some people have to be sacrificed for  
10 the sake of progress."

11 My question, and the question of  
12 people in communities across the province is:  
13 What about our rights to enjoy our property? Do  
14 we not have the right to expect that our health  
15 and enjoyment of our homes and yards will not be  
16 negatively impacted by the industry? This is a  
17 particularly important principle, since we were  
18 here first.

19 The separation distances that work for  
20 agriculture do not work for industrial systems.  
21 The industry argues that agriculture has evolved  
22 and changed over the years and has, therefore,  
23 altered the definition of normal farm practice  
24 through this evolution. This argument is simply  
25 industry-searching. Agriculture is not just about

1 food production. It is about communities allowing  
2 animals to live in a manner that respects the true  
3 nature, balance and solar nutrient cycling on  
4 farm. Families working together with neighbours,  
5 being involved in each other's lives, and  
6 connected in a meaningful way. People being part  
7 of the land, not just taking from it and using it  
8 as a waste disposal site. Providing safe and  
9 nutritious food for their family, and others, in  
10 the context of stewardship and community, that's  
11 what sustainability is about.

12 It has been my experience that the  
13 pork industry expects others to sacrifice the  
14 public good for the sake of the corporate good.  
15 Now, in their submission to the CEC, they are  
16 insulting us. They write, on page 8(2) that:

17 "There is a public good involved if  
18 there is a desire by the Provincial  
19 Government to increase the pace of  
20 change and, therefore, public  
21 investment and financial incentives to  
22 help producers adapt to the regulatory  
23 environment will be required."

24 This statement is ludicrous. The regulatory  
25 framework has developed as a direct result of the

1 problems invested in the industrial large scale of  
2 the industry. Regulations were asked for by the  
3 public to control the industry and to attempt to  
4 protect the public good. The costs of industry  
5 compliance should be paid for by the Industry, not  
6 the public.

7 In 2005, Minister Struthers told those  
8 attending the Brandon AMM Convention, that he was  
9 committed to the pollute or pay principle. He was  
10 speaking about water supplies that had been  
11 contaminated by abandoned gas station companies.  
12 How does the polluter pay principle apply in this  
13 instance? What are we to think of the polluter  
14 pay principle, in light of Minister Wochuck's  
15 announcement of assistance of up to \$150,000 per  
16 operation to change the manure storage and  
17 handling systems?

18 The focus of the government, heavily  
19 lobbied by the pork industry, has been to find  
20 creative ways to socialize the costs of the  
21 industry to the public and privatize the benefits.  
22 I wonder what would happen if the industry was  
23 truly left to compete, to be free enterprisers,  
24 and bear the costs of the environmental  
25 degradation left by the industry?

1                   The public's voice has been  
2 effectively silenced through the changes to the  
3 Planning Act and, as a result, the public interest  
4 has been forsaken. What we now have is  
5 stakeholder democracy, democracy for special  
6 interest groups like the Pork Council.

7                   The public is even being excluded from  
8 participation in ILO policy development. Last  
9 year, for example, there was a review of the Farm  
10 Practices Guidelines that set out separation  
11 distances and other things. I have correspondence  
12 from Mrs. Wowchuk, where I asked her when the  
13 public was to be consulted? She advised me,  
14 through letters, which I will submit to you, that  
15 the public would not be involved, just  
16 stakeholders.

17                   Now I want to talk a bit about some  
18 more on-the-ground reality about how  
19 sustainability can be achieved in communities,  
20 given how the regulatory framework and the  
21 decision-making process works.

22                   I will be submitting an exhibit which  
23 shows the location map of the Piggy Bank boar  
24 operation and the location of a small holding just  
25 south of it. While I was a member of the R.M. of

1 Daly Council, we received notification by the  
2 Campbells, the residence in the small holding,  
3 that their well had been contaminated by E. coli,  
4 and that her daughter and their eight-month-old  
5 baby had been suffering from E. coli from drinking  
6 water from their well. The Campbells also brought  
7 this matter to the attention of the council at a  
8 conditional use hearing on the feedlot, Piggy Bank  
9 spread lands being owned by the proponents and  
10 that concerns that manure would add to the  
11 problem.

12 I was informed, as a member of  
13 council, that these well contamination concerns  
14 were taken to Manitoba Conservation and staff were  
15 unable to determine exactly the source of where  
16 the E. coli was from and, hence, no action was  
17 taken. And this is a significant problem  
18 throughout Manitoba Conservation's enforcement  
19 regimen.

20 Drainage from the hog operation's  
21 spread acres was facilitated through the creation  
22 of unlicensed drains that move water into the  
23 municipal ditch. A culvert carried the water from  
24 the ditch into the low-lying area where the  
25 Campbell's drinking water well is situated. The

1 Campbells have never had livestock.

2 THE CHAIRMAN: Excuse me a minute.

3 Can we not have any conversations in the audience,  
4 please?

5 MS. JOHNSON: Excuse me, the news  
6 people, could you please take your interviews  
7 outside or wait until a break, please? You are  
8 disturbing the meeting here.

9 THE CHAIRMAN: Go ahead.

10 MS. PRYZNER: Thank you.

11 On November 9th, 2005, these pictures  
12 that are here on this screen are pictures of  
13 manure being spread from the hog operation that  
14 were taken. Oh, thank you. And as you can see,  
15 these -- the spreading is being conducted on  
16 frozen ground in the wintertime. And the really  
17 critical point about that is that this hog  
18 operation is under the 300 animal unit threshold  
19 and can spread in the winter.

20 But it seems to me that, you know,  
21 knowing that these people, and an eight-month-old  
22 baby, had been sick, and her mother had been sick  
23 and suffering from E. coli, that this operation  
24 might have been a little bit more careful about  
25 when and where it was spreading its manure. And

1 it spread it right up to the property line, right  
2 across from where these people lived.

3 And then later, in 2006, the R.M. of  
4 Daly Council, in its wisdom, after having granted  
5 the feed lot a conditional use permit, had the  
6 culvert removed.

7 And here is another example where it  
8 is a land owner taking manure from the Can Am  
9 Genetics hog operation in the R.M. of Daly and put  
10 it into cultivation pasture land adjacent to a  
11 creek. The complaint was launched in the fall of  
12 2006 because liquid hog manure had been spread on  
13 November 11, 2006 within feet of the creek. The  
14 ground was frozen. And that creek is a major  
15 spring run-off channel for water in the area and  
16 empties into the Oak River.

17 I spoke with the Environment Officer,  
18 Ms. Christine Roberts, about this matter. And she  
19 informed me that she was unable to investigate in  
20 the fall because the ground was frozen. And there  
21 was too much snow that had fallen on it since the  
22 submission of the complaint on November 17, 2006.  
23 She suggested that it might be possible to conduct  
24 an investigation in the spring. She left word to  
25 her replacement that follow-up should happen in

1 the spring.

2 I was told by the new Environment  
3 Officer on April 13, 2007, that no follow-up has  
4 occurred. He was unable to attend to the location  
5 during spring run-off when samples could be taken,  
6 due to lack of familiarity with the area, and that  
7 it was unlikely sampling now would have been  
8 fruitful, given that spring melt had finished by  
9 the time we spoke.

10 During the spring of 2005, Deerboine  
11 Colony had experienced flooding of a sheep barn  
12 and yard, as well as a cattle wintering area. I  
13 was told by Ms. Roberts then that no enforcement  
14 action was taken because the colony had dyked the  
15 area and: "had done their best." Nevertheless, a  
16 significant amount of manure was carried by the  
17 flooding directly into the Assiniboine River.

18 Hangar Farms hog operation has been  
19 investigated several times over the year. The  
20 2002-2003 MC Enforcement Summary shows several  
21 infractions. Hangar Farms also was convicted and  
22 levied a fine of \$1,200 for trenching a manure  
23 storage to an irrigation water storage, and  
24 improperly storing manure in the water retention  
25 pond. Yet, Water Stewardship has not required

1 licensing of this water storage facility, despite  
2 the legislative requirements that exist under the  
3 Water Rights Act. Up until recently, Hangar Farms  
4 operated without a Water Rights License. It was a  
5 citizen complaint that forced the issue.

6 Hangar Farms still operates at this  
7 location. The spread lands were owned by a  
8 company called BG Ranch. However, Hangar has sold  
9 some of the operation to a company called Aero  
10 Farms. A company called Devonridge Farms also  
11 operates at this location now, owning all of the  
12 spreadlands. And when Devonridge Farms was  
13 created, all of BG Ranch's assets were transferred  
14 to it.

15 I was made aware of the complaint  
16 about winter spreading at this hog operation site  
17 and spoke with Travis Parsons, then a Conservation  
18 environmental engineer, about it. He told me that  
19 Hangar Farms per se is now under 300 animal units  
20 in size and can now winter spread. Unfortunately,  
21 Conservation cannot now determine which  
22 corporation is spreading the manure during the  
23 winter and, therefore, cannot take enforcement  
24 action.

25 The new Environment Officer has told

1 me the same thing when I spoke with him about the  
2 operation on April 13th, 2007 about a recent  
3 complaint regarding winter spreading that was made  
4 in March of this year.

5 Piggy Bank, the hog operation north of  
6 the Campbells, is owned by Mr. Larry Friesen's  
7 daughter. At least that's what he told me in  
8 2002.

9 A major shareholder and director of  
10 Can Am Genetics is Larry Friesen's wife, Bonnie  
11 Friesen. The rumour is that Hangar Farms has  
12 bought the operation, but I don't have any  
13 confirmation of that at this time. But Bonnie is  
14 the sole owner of Devonridge Farms and was the  
15 sole owner of BG Ranch.

16 Hangar Farms is solely owned by Larry  
17 Friesen.

18 Mr. Friesen is the Weanling Export  
19 Director on the Manitoba Pork Council Board, and  
20 has been for several years.

21 Devonridge Farms/Aero Farms, holds a  
22 Water Rights License to supply water to the  
23 tri-corporate hog operation. And Devonridge Farms  
24 has an agreement with RGM Holdings Ltd. to provide  
25 irrigation water for potatoes sourced out of two

1 wells in the Assiniboine River Valley on land  
2 around the hog operation.

3 The president and holder of RGM  
4 Holdings is Robert Mazer. RGM Holdings is the  
5 registered owner of Sundance Enterprises.  
6 Sundance Enterprises operates with Ray Redfern,  
7 who owns a potato facility on land adjacent to the  
8 Devonridge property around the Sundance hog barns.

9 Sundance Enterprises also has an  
10 Environment Act regulation to irrigate out of the  
11 Assiniboine River. This License serves Sundance,  
12 Deerboine Colony and was amended to include Harold  
13 and Patricia Dyck. Harold Dyck was a councillor  
14 in the RM of Daly from 2002 to 2006.

15 Stated investors in the Daly Feeders  
16 proposal which was approved by Daly Council were  
17 Ray Redfern, Robert Mazer, Larry Schweitzer and  
18 Urs Baessler. Urs Baessler is the owner of the  
19 land upon which Piggy Bank spreads its manure and  
20 is situated on part of the land owned by Baessler.

21 Larry Schweitzer is the President of  
22 the Hamiota Feedlot, upon which the Daly Feeder  
23 operation was to be modeled, including its manure  
24 management system.

25 A major shareholder of the Hamiota

1 Feedlot is Preston Stock Farms Ltd., which is  
2 owned by Dr. Allan Preston, Assistant Deputy  
3 Minister of Agriculture, along with his wife and  
4 son. Allan Preston is also a director of the  
5 Hamiota Feedlot. I have recently learned that he  
6 is now the MAFRI FIPPA Access Coordinator.

7 Harold Dyck's Water Rights License is  
8 co-issued to Central Manitoba Resource Management.  
9 The Central Manitoba Resource Management is a  
10 for-profit cooperation based on a shareholder  
11 structure. Individuals are shareholders by formal  
12 agreement. Shareholders transfer their assets to  
13 CMRM and lease assets back. Essentially, there is  
14 a joint ownership of assets. Issued Water Rights  
15 Licenses are jointly in the name of CMRM and the  
16 shareholder. Project shareholders, irrigators,  
17 operate under these licences and the Environment  
18 Act licences.

19 The Deerboine Colony irrigation system  
20 is owned and operated by CMRM. The shareholders  
21 are the 33 and one-third Deerboine, 33 and  
22 one-third Ray Redfern and 33 and one-third Don  
23 Loewen from Sundance Enterprises.

24 Now, Terry Linto, a new name, applied  
25 for an Environment Act License to irrigate from

1 the Little Saskatchewan River. He is described in  
2 the Environment Act License application as a  
3 partner with Daly Feeders/Urs Baessler. He also  
4 applied for a Water Rights License on Daly  
5 Feeder's behalf, to supply water to the feedlot  
6 from a well on the same quarter section as the  
7 application to establish an irrigation system.

8 The Environment Act License for  
9 Sundance/Deerboine includes seven land owners, one  
10 of which is Belfield Farms, which is owned by  
11 Terry and Susan Linto. Daly Feeders subsequently  
12 re-applied for a Water Rights License to supply  
13 the feedlot at two locations - the Linto site and  
14 another on property owned by the wife of Daly  
15 Reeve Evan Smith. And when this matter was  
16 brought to his attention at a council meeting, the  
17 Reeve claimed he was unaware of the application  
18 being made. And at a subsequent meeting, he  
19 reported to council, when asked, by me, that Water  
20 Stewardship had advised him that an application  
21 could be made by anyone for a license without his  
22 knowledge.

23 I have since been advised by Water  
24 Stewardship that the land owner has to sign an  
25 agreement with the party before a water license

1 can be issued to that party.

2                   Finally, Brian English, MAFRI  
3 agricultural engineer, was identified on the Daly  
4 Feeders Livestock Information Operation  
5 Information review proposal as the "Design  
6 Consultant/Advisor" for the proposal. He designed  
7 the feedlot under the stamped proposal "Manitoba  
8 Agricultural Engineer". Mr. English was a member  
9 of the Technical Review Committee reviewing the  
10 Daly Feeders proposal. I became aware that he had  
11 removed himself from the Technical Review  
12 Committee process because I had secured a memo  
13 through a FIPPA request that I had made. At an  
14 event held in February of 2005, which we both had  
15 attended, I asked him how he could be the  
16 consultant/advisor for Daly Feeders and also be on  
17 the Technical Review Committee?

18                   The March 1, 2005 memo sent to "All  
19 Members of the Southwest Technical Review  
20 Committee", from Brian English reads:

21                   "Do not send me your comments about  
22                   (17(2)(g) proposal..."

23 and the proposal is excluded under the FIPPA Act,

24                   "...to set up a feedlot in the R.M. of  
25 Daly. 17)2(g) listed me as his

1                   'consultant' on his LPOI form.  
2                   Ruth Pryzner, a councillor with the  
3                   R.M. of Daly, considers that this puts  
4                   me into a 'conflict of interest'  
5                   position. Ergo, I do hereby state  
6                   that I will not be participating in  
7                   any way of the review of the proposal.  
8                   Please address all of your comments,  
9                   or questions, to Mr. James Hood."

10                  Mr. English chose not to participate in the  
11                  September 2005 conditional use hearing, but  
12                  resumed participation in the second hearing held  
13                  on modifying conditions of approval held in March  
14                  of 2006.

15                         Are you confused yet? A careful  
16                         examination of the documentation that I have  
17                         provided you should clear up the confusion.

18                         I ask how environmental enforcement  
19                         can be achieved in this context? This is my  
20                         municipality. Indeed, how can the Campbells be  
21                         assured that the province will act in the public  
22                         interest, their interest?

23                         My job as municipal councillor, faced  
24                         with assessing and making a decision on two  
25                         livestock proposals, one a cattle feedlot and the

1 other a hog barn upgrade and expansion with the  
2 Deerboine Colony, was frustrated by these  
3 occurrences. How is a councillor to make a  
4 decision that is in the public interest within  
5 this context?

6 Further, a careful examination of the  
7 Technical Review Committee Reports, the R.M. of  
8 Daly Council minutes, and other documents that I  
9 will be providing, will show that this was the tip  
10 of the iceberg in terms of the issues that raised  
11 serious and fundamental concerns about the role  
12 the Technical Review Committee plays in the  
13 conditional use process and environmental  
14 protection.

15 The Technical Review Committee failed  
16 to verify spread acre suitability in both  
17 proposals. In fact, I had attempted to get proper  
18 orthophotos to complete such assessment myself as  
19 a member of council. I was told by a Technical  
20 Review Committee member James Hood that not only  
21 did the Technical Review Committee not have access  
22 to the types of photos that I was requesting, but  
23 that none existed. I provided him with a sample  
24 the following day and was never provided with  
25 proper orthos to verify and evaluate the spread

1 lands. It was important for me to be provided  
2 with these because James Hood had informed me,  
3 after the hearing on Daly Feeders, that it was not  
4 the job of the Technical Review Committee to  
5 verify spread acre ability. When I asked him  
6 whose job it was, he had no response.

7           The chair of the Technical Review  
8 Committee at that time, Mona Cornock, failed to  
9 provide me with information that I had requested  
10 in July for the Daly Feeders proposal. I put in a  
11 request, just an informal request, and they turned  
12 it into a FIPPA request. I was promised a cost  
13 estimate within a week. In November 2005, after  
14 the conditional use hearing had been completed in  
15 September, the MAFRI Access and Privacy  
16 Coordinator, Diane McCoy, phoned me asking me if I  
17 still wanted the information.

18           And that's not the first time that  
19 that's happened to me in my involvement as a  
20 member of the public in other conditional use  
21 processes. And so there is a really big problem  
22 in people being able to access information, and to  
23 be able to ensure that Technical Review Committees  
24 and the people that are entrusted in this whole  
25 process with ensuring that the environment is

1 protected are doing a proper job. What we're  
2 finding out is that they are not.

3 Public participation in decisions that  
4 have environmental implications and impacts  
5 requires timely access to complete and relevant  
6 information. This is a very serious problem in  
7 this province and directly impacts how and what  
8 decisions are made. And without the access to  
9 timely and proper information of the conditional  
10 use, licensing and permitting, enforcement and  
11 policy-making levels, the members of the public  
12 cannot exercise their legal right to participate  
13 as full and informed members of a democratic  
14 society. It also impacts their ability to  
15 participate in environmental protection.

16 And that leads me to -- I am not going  
17 to dwell on this, but because it's been in the  
18 media, and I have mentioned this to the Commission  
19 before, that there is a problem with the fact that  
20 I am going to have to wait 13 and a half years to  
21 get the information that I have requested. I  
22 mean, when I heard that this Clean Environment  
23 Commission was going to occur, I said: Like, what  
24 information is critical for understanding what's  
25 happening with the hog industry? You know,

1 obviously, it's important to know what's happening  
2 on the ground, in terms of nutrient loading by the  
3 industry, whether or not manure storages are safe,  
4 upon what basis Technical Review Committee reports  
5 are generated and decisions taken by councils, and  
6 what kind of job Manitoba Conservation is doing in  
7 ensuring that permits and enforcement activities  
8 are protecting our environment and water.

9 I also concluded that we needed to  
10 know how much water use has been licensed and how  
11 much is actually being withdrawn from our  
12 aquifers. This information would help us  
13 understand the limits that hog production and  
14 expansion will place on other kinds of economic  
15 activities in our communities. And, most  
16 importantly, it would help us understand what we  
17 can expect from changes to the hydrological cycle  
18 due to the removal of such large volumes of water  
19 from the hydrological system that the Manitoba  
20 Pork Council has so happily described in its  
21 March 5th presentation.

22 So, in essence, this whole question  
23 about not getting access to information is  
24 unacceptable. And it has severely impacted my  
25 ability to provide concrete evidence on the actual

1 impacts of the industry in this province. And so  
2 I am reduced to telling you my experience with  
3 various aspects of the industry and how it has  
4 impacted my community.

5 Now, how much do I have left?

6 THE CHAIRMAN: About 10 minutes.

7 MS. PRYZNER: Okay. I am going to  
8 talk a bit about phosphorous now.

9 Now, one of the things that's  
10 absolutely fundamental for this Commission to look  
11 at is the question of phosphorous loading by the  
12 hog industry. And because we don't have access to  
13 the actual soil tests results, we can't tell you  
14 exactly what's happening in each operation and in  
15 each area of the province.

16 So what I want to talk about here is  
17 to take a look at what is considered to be a high  
18 soil test P, because this is going to impact the  
19 regulatory environments in the future with the hog  
20 industry. It is dependent upon the information  
21 source. So some of the Manitoba sources that we  
22 have available are Soil Test Lab Manuals, the  
23 Technical Review Committee, as expressed in their  
24 reports, the Manitoba Phosphorous Expert  
25 Committee, Livestock Manure and Mortalities

1 Management Regulation, the Soil Fertility Guide,  
2 and the Farm Practices Guidelines.

3           There is a question of, you know, what  
4 is a high soil test P, in terms of agronomic  
5 versus environmental phosphorous levels. And  
6 then, you know, the question is: How does a  
7 municipal council determine what environmental  
8 levels are in their decisions?

9           Now, I am not going to read through  
10 all of these, because I am running out of time,  
11 but you can see that there is -- the Technical  
12 Review Committee tends to consider soil  
13 phosphorous concentrations in excess of 40 pounds  
14 per acre, or 20 parts per million, using the Olsen  
15 method, as being high, according to the Soil  
16 Fertility Guide. And they make all kinds of  
17 cautions in the number of reports I have cited,  
18 the several reports that I have read where, you  
19 know, consistently 40 pounds per acre, using the  
20 Olsen method, are considered to be high.

21           And then in the Wilf Rogers report,  
22 they do talk about:

23           "If the amount of phosphate exceeds  
24 the phosphorous regulations by 250  
25 percent, or more, they should be

1 calculating an application rate based  
2 on phosphate instead of nitrogen."

3 And I think that's a back way of saying: If you  
4 are going to have enough spread acres, you will  
5 need two and a half times the amount of acres,  
6 compared to what is calculated using the nitrogen  
7 standard. And that's the amount of spread acres  
8 that the Technical Review Committee bases its  
9 assessment on, at this point.

10 And there is just more examples from  
11 the Technical Review Committee. And in this  
12 particular operation, it shows that there are  
13 really high phosphorous levels already.

14 Now, what is high soil test P, from  
15 the perspective of the Agcise Soil Test Manual?  
16 It's more in the range of what the Technical  
17 Review Committee is talking about, but it's much  
18 lower. You can see that it ranges from very low,  
19 1-3 ppm, which is 4.6 to 13.8 pounds of P2O5 per  
20 acre, to anything high which is 4-7 ppm, which is  
21 16.5 pounds per acre.

22 What does Manitoba's phosphorous  
23 regulation say about what levels of phosphorous  
24 are high? Anything less than 60 parts per  
25 million, which is 276 pounds of P2O5 per acre,

1 there is no management response required. And we  
2 were going all the way up to 180 parts per  
3 million, which is 828 pounds of P2O5 per acre,  
4 that's the upper limit of this threshold. And  
5 when you take that into comparison with the other  
6 sources of information that we have on what's  
7 high, I have to ask the question: What is this  
8 phosphorous regulation about?

9           And let's put it in the context of  
10 this phosphorous triangle. And I got this from a  
11 document that is used in classrooms in AG schools  
12 in Alberta. And so, essentially, what this is  
13 saying is, if you look at the tip of this  
14 triangle, you've got about 0.1 percent of the  
15 dissolved orthophosphate or the available  
16 phosphorous that's in that tip. 9.9 percent of  
17 the labil, what they call the labil pool, is  
18 available phosphorous. And it's just that tip  
19 there that shows up in soil test results.

20           So when the soil -- when the Olsen  
21 soil test method is used, for the purposes of  
22 implementing the phosphorous regulations, all that  
23 is essentially going to show is 10 percent of  
24 what's in that soil. So, conceivably, if we go to  
25 the 180 pounds per million threshold, or 800

1 pounds plus, that's what's going to show up in the  
2 soil test. So how much phosphorous is in that  
3 soil, and how many years is it going to take, if  
4 you stopped putting manure on, for that  
5 phosphorous to be removed?

6 Now, what the industry will tell us,  
7 and Martin Sharpe made this argument at one of the  
8 conditional use hearings in the R.M. of Daly, was  
9 that, you know: This is money in the bank, and  
10 that Manitoba soils can benefit from some  
11 phosphorous loading. But my question is how much  
12 money in the bank do we need? And science will  
13 tell us, Dr. Sharpley, Dr. Flaten, the scientists  
14 around the world will tell us, that soils do not  
15 have the infinite capacity to absorb soil.

16 And, in fact, Dwight Williamson told  
17 me that you should look of it or think of it as a  
18 bucket. And if you are loading the phosphorous  
19 into the bucket, eventually it's going to overflow  
20 the top of the bucket. But there is also leaks in  
21 the bucket, and phosphorous is moving all the  
22 time. So the science also tell us that at 60  
23 parts per million, there is no agronomic benefit  
24 beyond 60 parts per million. And that anywhere,  
25 along a phosphorous application to land, there can

1 be phosphorous mobilization under the right  
2 conditions.

3 But it is also generally accepted that  
4 phosphorous can be managed if it is applied to  
5 meet the crop needs. So why are we going to allow  
6 it to buildup to 800 plus pounds of soil test P?  
7 And that's only 10 percent of what's really there.

8 A concern that arises out of that is  
9 in the Red River Flood Valley, where there is a  
10 huge concentration of hog operations and other  
11 livestock operations. And when you've got those  
12 kind of concentrations, saturation of phosphorous  
13 that's bound in the soil under anaerobic  
14 conditions, like during flood events, what my dad  
15 calls Red River flush, this phosphorous is easily  
16 dissolved, and that is carried off into Lake  
17 Winnipeg and other surface water bodies. And  
18 that's a bigger problem for the lake than the  
19 sediment particulate run-off of P, because that  
20 stuff will stay bound for a while in the sediment  
21 bed of the lake; although, it does present a  
22 long-term problem for the viability of water  
23 bodies.

24 And so I'm just going to wrap it up  
25 here.

1 THE CHAIRMAN: Yes, you've got a  
2 minute.

3 MS. PRYZNER: And say that, in my  
4 experience, given the way in which the hog  
5 industry has expanded, and my experience with  
6 government and the decision-making process and the  
7 way in which people have been treated in  
8 communities, we're in trouble. We know that there  
9 are environmental problems associated with the hog  
10 industry. And there is very little that we can do  
11 about it under this current regulatory regime.  
12 And the regulatory regime is totally inadequate,  
13 especially this phosphorous regulation.

14 THE CHAIRMAN: Thank you, Ms. Pryzner.  
15 And you will be providing us with some of the --  
16 the written presentation of today's presentation  
17 plus --

18 MS. PRYZNER: I will be doing that.  
19 And I will also provide you with the documentation  
20 that I have to back up everything that I have  
21 said. I have all of the documentation to prove  
22 this stuff.

23 THE CHAIRMAN: And when will we be  
24 getting that?

25 MS. PRYZNER: Well, I'm hoping within

1 the next week.

2 THE CHAIRMAN: Oh, okay, that will be  
3 fine.

4 MS. PRYZNER: There is a considerable  
5 amount of photocopying that I have to do. And I  
6 also want to list out the documents that I am  
7 providing.

8 THE CHAIRMAN: Okay, thank you.  
9 Edwin, anything?

10 We might have a question or two.

11 MS. PRYZNER: Sorry.

12 THE CHAIRMAN: My compatriots.

13 MR. YEE: Yes, Ms. Pryzner, perhaps  
14 just maybe some general comments. I was going to  
15 ask you with respect to the fact that you were a  
16 municipal councillor, and you talked a great deal  
17 about the conditional use hearings and those with  
18 the Technical Review Committee's involvement. Do  
19 you have any specific recommendations on how that  
20 process could be improved?

21 MS. PRYZNER: Well, I've thought a lot  
22 about that. And I have come to the conclusion  
23 that it has to be replaced with some other  
24 process. You know, the Technical Review Committee  
25 membership is playing dual roles within

1 government, as well.

2 I mean, you know, the example of  
3 Mr. English is there. And the Farm Practices  
4 Guidelines clearly states that, you know,  
5 proponents should avail themselves of the  
6 resources. And they are a lot of the same people.  
7 So how can you have those people, who are helping  
8 a proponent develop a proposal, be the ones to  
9 assess the credibility of the proposal?

10 You know, there is lot of other kinds  
11 of problems with the Technical Review Committee.  
12 They don't verify any information. And that's the  
13 experience of people all across the province.  
14 They only do preliminary reports based on  
15 available information. They don't go and ground  
16 truth. They don't go and search out  
17 site-specific -- the site-specifics of operations  
18 to any extent.

19 And those -- I mean, how can you say  
20 that their report is an environmental assessment  
21 of any kind, and that council should be confident  
22 with making a decision based on that kind of a  
23 review, because there are just huge information  
24 gaps.

25 MR. YEE: Thank you.

1 THE CHAIRMAN: Wayne?

2 MR. MOTHERAL: No. I am just going to  
3 mention, Ms. Pryzner, that I have written down  
4 many of your concerns in point form, and I am  
5 looking forward to getting more of your  
6 information.

7 MS. PRYZNER: Okay. I will be  
8 supplying it to you.

9 THE CHAIRMAN: Thank you very much,  
10 Ms. Pryzner.

11 MS. PRYZNER: Thank you.

12 THE CHAIRMAN: Next is Alan Baron.  
13 Would you please introduce yourself for the  
14 record, sir?

15 MR. BARON: Alan Baron.

16 ALAN BARON, having been sworn, presents as  
17 follows:

18 THE CHAIRMAN: Go ahead, sir.

19 MR. BARON: Good afternoon, panel  
20 members and ladies and gentlemen. I appreciate  
21 the opportunity to speak to you today.

22 And the content of my presentation  
23 will focus mainly on manure management nutrients  
24 and the surplus of applying nutrients on land. I  
25 will go through some of my personal background and

1 history, a brief industry of the pork or hog  
2 industry and, in particular, assess the nutrient  
3 management, and some regulations, and stick to  
4 nitrogen and phosphorous. And so it is mainly  
5 going to be an assessment of the nutrient  
6 management.

7 We should consider manure as a  
8 resource. My personal farming background was in  
9 mixed grain, oilseed and potato production. We  
10 were also in livestock in the early years. And we  
11 did use manure. We had excess manure from a large  
12 cattle feedlot. And our rotation practice was  
13 every third year, which I believe is the way that  
14 manure is supposed to be handled.

15 During my 30-year farming career, with  
16 potatoes being in the crop rotation, I played an  
17 active role in striving for a balance of nutrients  
18 in the soil. This was done to increase yield  
19 potential and obtain the most valuable fertilizer  
20 input costs. And it was environmentally  
21 responsible, as well.

22 And throughout the years 1988 to 1994,  
23 as a result of third party groundwater  
24 contamination on my farm, I came to realize how  
25 vulnerable our water and soil resources are when

1 they are abused.

2 THE CHAIRMAN: Sir, could you just  
3 slow down a touch?

4 MR. BARON: Okay.

5 THE CHAIRMAN: Our reporter might have  
6 trouble keeping up.

7 MR. BARON: In recent years, I have  
8 played an active role in environmental matters,  
9 including environmental license proposals for  
10 industrial wastewater management and conditional  
11 use hearings for Intensive Livestock Operations.  
12 To provide informed and credible information for  
13 these processes, it has been necessary to seek  
14 professional advice from government departments  
15 and university faculty members.

16 The waste management strategy drafted  
17 and promoted by the Manitoba Government, and the  
18 hog industry in 1994, and which was used until  
19 January 1, 2006, was not sustainable. The word  
20 "sustainable" implies forever. Yet, in just 13  
21 years, we were already assessing the  
22 sustainability and the viability of Manitoba's hog  
23 industry.

24 Before I go further, I would like to  
25 acknowledge that economics, and the benefits of

1 economic growth, have played a major role in the  
2 expansion of Manitoba's hog industry. I  
3 understand that the Manitoba Pork Council's role  
4 is to present a positive vision on behalf of their  
5 industry, but this has to be supported by clear  
6 and credible data.

7           The Provincial Government's role is a  
8 conflicting one when you look at economics. The  
9 Provincial Government promotes the development of  
10 the hog industry, but also they are responsible  
11 for regulating it.

12           Now, manure is, when recognized, a  
13 very good natural fertilizer. It has all of your  
14 macro and micro nutrients, but it is an imbalance  
15 with what the crop requirements are. It doesn't  
16 matter, if you use manure on an annual basis for  
17 crop production, you are guaranteed that you are  
18 going to increase the phosphorous load. And  
19 manure is a good source of natural nutrients, when  
20 managed properly. The balance is best achieved  
21 with proper rotation on an adequate land base,  
22 also in combination with use of the synthetic  
23 fertilize to achieve a nutrient balance for the  
24 crops.

25           It is too bad that I don't have the

1 slides here. But that bar that you are seeing is  
2 an example of one year of wheat production. So  
3 the hog manure application was 85 pounds of N and  
4 63 pounds of phosphorous. The wheat crop,  
5 40-bushel, used the 85 pounds of N and only 32 of  
6 the phosphorous, and that left a residual of  
7 31 pounds of P<sub>2</sub>O<sub>5</sub> in one year. The ratio of N-P  
8 in manure does not match the crop nutrient  
9 requirements. There will always be a residual of  
10 P as the application rate is based on the Nitrogen  
11 composition in the manure.

12 The next slide is an example of a  
13 10-year rotation of wheat/canola rotation. So the  
14 hog manure, in 10 years, you applied 985 pounds of  
15 N, 671 of phosphorous. And in those 10 years, the  
16 crop rotation used 985 pounds of nitrogen and only  
17 450 of the phosphorous. So after 10 years there  
18 was a 220 odd pound residual of P.

19 In this example, manure is applied so  
20 that nitrogen in the hog manure inputs equals N  
21 removed by the crops. After 10 years, a surplus  
22 of 221 pounds of P<sub>2</sub>O<sub>5</sub>, phosphate, or 48 ppm, has  
23 built up in the soil.

24 In 1994, a committee comprised of  
25 various disciplines published the first guidelines

1 for hog producers in Manitoba. In this guideline,  
2 and other livestock guidelines, was a formula for  
3 calculating the land base required for manure  
4 application. The use of this formula is so  
5 complex that producers, municipal councillors and  
6 the public had to trust that the acreage required  
7 after all of the calculations was correct. There  
8 are still producers today that don't fully  
9 understand how to use this formula.

10 If you look at the formula itself, the  
11 number of livestock, that's simple. The animal  
12 unit factor, which was strange to farmers. And  
13 then you multiply the number of livestock by the  
14 factor to come up with the animal units.

15 MS. JOHNSON: Could you please slow  
16 down?

17 MR. BARON: Okay. And then you have  
18 to use the storage and application factor, more  
19 strange. And then you apply the soil and crop  
20 nitrogen utilization factor, another strange.  
21 What's going on here?

22 The days of feeding location. And for  
23 acres required for feeding location, you go C  
24 times B, times E, times F, divided by 365, and  
25 trust the answer you have received as what you

1 need.

2                   This formula was universally accepted  
3 by government and industry for 13 years and has  
4 been used by proponents, Technical Review  
5 Committees and municipal councils to expand the  
6 intensive livestock operation industry of  
7 Manitoba. The public was assured that, by using  
8 this formula, and the environmental regulations  
9 for livestock, Manitoba's hog industry would be  
10 regulated by the most stringent rules in North  
11 America.

12                   This formula became problematic for  
13 producers in a short period of time because they  
14 reached seeding the Nitrogen threshold of the  
15 regulations. There are some major flaws in this  
16 acre requirement formula. It promoted annual  
17 application of manure versus the rotational  
18 system. Nitrogen is the only nutrient used for  
19 application rates. P was not considered.

20                   It is assumed that soil nutrients are  
21 at the value of zero starting every year. There  
22 is no counting for nutrient contribution from crop  
23 residue. There was no consideration for  
24 contingency plans that alter the nutrients that  
25 are actually used, such as drought or flood

1 events.

2 In spite of these flaws, there have  
3 been no amendments to this land use formula until  
4 January of 2006, when the P regulation was  
5 introduced. However, there have been amendments  
6 to the nitrogen thresholds in regulations.

7 And the following is a historical  
8 review of these amendments. At the start of '94,  
9 it wasn't in regulation, but the maximum  
10 application rates recommended in the guideline was  
11 for heavy soils 90 pounds per acre and on light  
12 soils 70 pounds per acre. And if we were able to  
13 stay there, we probably wouldn't be sitting here  
14 today.

15 The maximum application increased by  
16 1997 to 140 pounds per acre on medium to heavy  
17 soils, 90 pounds on light soils and alfalfa.  
18 275 pounds per acre and the required soil depth  
19 sampling was set at four feet, which I think was a  
20 good policy at the time.

21 And then I think that the pork  
22 industry, the hog industry, thought it was too  
23 expensive to sample that deep. So in 1998, the  
24 regulation was rewritten, used the same rates of  
25 '97, but they reduced the soil sampling depth to

1 two feet. So what that means, it saved them  
2 costs, but they also didn't find as much of the N,  
3 either.

4 And that wasn't quite good enough. In  
5 2004, they changed the soil classes. We kept it  
6 at 140 pounds per acre for your top rate of soils,  
7 but you could apply two times that during the  
8 growing season or 280 pounds. And I was told that  
9 the reason behind that was if an audit was done  
10 during the year, that they would have exceeded the  
11 140 pounds. And so they wanted to double that  
12 during the growing season. And from my  
13 experience, with deep soil nitrous in my industry  
14 in the early nineties, 280 is not an  
15 environmentally friendly rate for nitrogen  
16 leaching possibilities.

17 The lower soil classes were rated 90,  
18 or two times of that, and 180 during the growing  
19 season. And the lowest cost of soil, which is  
20 just above the non-what would you call it, well,  
21 it's actually just strictly pasture land. It  
22 can't be used for anything else. They will allow  
23 30 pounds per acre on this, but two times as well  
24 during the growing season.

25 The thresholds that are being allowed

1 today cannot be rated as low risk for leaching,  
2 because the land base farm land that has  
3 facilitated surplus and application, the N  
4 thresholds in the regulation were gradually  
5 increased. In my opinion, these increased  
6 tolerances were made to accommodate the increased  
7 N concentrations in manure fields. This also  
8 added to the P loading of the soil.

9 I will move from discussing nitrogen  
10 to the confusing element of phosphorous.  
11 Phosphorous is described in different terms and  
12 units of measurement. Ppm is usually used to  
13 describe the soil test measurement. P, elemental  
14 phosphorous. And it is also called P2O5 for  
15 phosphate.

16 The soil test that we use in Manitoba  
17 is the Olsen method. The spelling is wrong. And  
18 what is confusing about this is that you can  
19 describe it in ppm, P and P2O5. So I did a little  
20 formula for you. 10 ppm times 2, equals  
21 20 pounds of P per acre. And that 20 pounds of P  
22 per acre, times 2.3, equals 46 pounds of P2O5 per  
23 acre.

24 When studying research documents,  
25 livestock proposals, or Manure Management Plans,

1 you have to be careful as you are comparing apples  
2 to apples, which formula is being used.

3 The different terms can be used to  
4 present the lower than actual quantity. The P205  
5 form is understood by farmers. Yet, the P  
6 thresholds are expressed as ppm, or the lowest  
7 possible numerical value that they can be  
8 described in.

9 The hog industry usually describes  
10 phosphorous as P in pounds per acre, versus pounds  
11 to P205 per acre. The upper threshold of 180 ppm  
12 equals 180 pounds of P per acre or 826 or 828  
13 pounds of P205 per acre.

14 And so this slide here was something  
15 that the previous speaker was mentioning. And it  
16 is to point out that this slide compares economic  
17 P ratings found in Manitoba Agriculture Food and  
18 Rural Initiatives, MAFRI, Soil Fertility Guide, to  
19 P risk ratings for P run-off from cropland  
20 established by regulation.

21 And if the agronomic soil test value  
22 of 20 plus ppm, the recommended rate of P  
23 application, is less than the crop removal rate,  
24 then why doesn't P threshold of less than 60 ppm  
25 allow unlimited P application, and the 60 to 119

1 ppm threshold value allow two times the crop  
2 removal rate? This is for an industry that claims  
3 they apply their manure to meet the crops nutrient  
4 requirement? We may be at the crossroads for  
5 Manitoba's hog industry.

6 In summary, the changes to the  
7 regulations have allowed for increasing amounts of  
8 residual N. And now we are becoming aware of the  
9 concerning levels of residual P in manured soils.  
10 This awareness has probably resulted from the  
11 acknowledged of the excess nutrients accumulating  
12 Lake Winnipeg and their negative impact on the  
13 lake. Individual producers may believe that their  
14 contribution would be insignificant, but the  
15 cumulative effect should not be ignored.

16 This was just a graph illustrating the  
17 Manitoba sources of phosphorous to the lake, Lake  
18 Winnipeg Stewardship Board, graph document. This  
19 graph illustrates the Manitoba source of  
20 phosphorous to Lake Winnipeg. Agricultural's  
21 contribution is significant at 35 percent. I  
22 would expect agriculture to always be a major  
23 contributor of phosphorous to Lake Winnipeg, but  
24 what can we do -- what can be done to reduce  
25 agriculture's share?

1                   In certain scenarios, managed manure,  
2   based on nitrogen N content, they resulted in  
3   elevated levels of soil P. This is old science.  
4   As far back as 1979, as stated in the Canada  
5   Animal Manure Management Guide, it warns us that  
6   applying manure, based on nitrogen content, can  
7   result in elevated levels of soil phosphorous.  
8   Managing manure based on phosphorous, utilization  
9   of crops, is a more sustainable manure management  
10  strategy.

11                   And this is a quote from Manitoba Pork  
12  Council's Truth Matters:

13                   "By strict regulation, manure can only  
14                   be applied to the land as fertilizer.  
15                   That implies applied manure  
16                   application rates should not exceed  
17                   crop removal rates."

18  That's their statement by publication.

19                   And next is a slide of the phosphorous  
20  rating page, appendix table 12 under the Crop  
21  Fertility Guide. You will note that the similar  
22  values to what the previous speaker had up, with  
23  20 being rated at high, and over 20 is very high,  
24  in this case. Medium is in the 15 range, I  
25  believe, from what I have here.

1                   These phosphorous soil test ratings  
2   are based on agronomic needs of the crops. These  
3   are much lower test values than those used in the  
4   pre-regulation for hog manure. Consider the  
5   following fact regarding current P regulations for  
6   hog producers that soil test P levels between 60  
7   and 119 ppm, the producer can apply two times the  
8   crop removal rate of P. This is significantly  
9   greater than agronomic requirements or  
10  recommendations. For example, when soil test P is  
11  at 20 ppm, agronomic recommendations suggest  
12  starter P rates only or zero application for seed  
13  placed P.

14                  High soil test P values are common in  
15  fields fertilized with hog manure. As soil test P  
16  increases, the risk of phosphorous loading to  
17  surface water increases at the same rate.

18                  Manitoba Pork Council's recent claim  
19  of being only one percent responsible for the P  
20  load to Lake Winnipeg warranted some  
21  investigation. By using current data, and in the  
22  absence of soil test information, I discovered a  
23  method of establishing the hog industry's  
24  phosphorous contribution to Lake Winnipeg. By  
25  considering all of Manitoba's cropland acres,

1 11,650,000, a constant factor was found that  
2 represents the amount of P in the sediment and  
3 organic matter that would move off the landscape  
4 into Manitoba's surface water and contribute the  
5 1,200 metric tonnes of P to Lake Winnipeg, which  
6 would be Manitoba's total agricultural share. The  
7 variable factor used for these calculations is the  
8 concentration of P in the sediment and expressed  
9 as ppm P.

10 The next two graphs will be showing  
11 the impact that 742,000 acres of crop land used  
12 for hog manure application can have on Lake  
13 Winnipeg when soil test P values are -- high soil  
14 test P levels are achieved.

15 The graph here is a summary of all of  
16 the calculations that I did. And the information  
17 I used to create the graph was the Manitoba crop  
18 land acres of 11,650,000. And I averaged the soil  
19 test phosphorous for Manitoba at 15 ppm P. The  
20 acres used for the manure application in Manitoba,  
21 is 742,000. And the source of that information is  
22 from Manitoba Conservation.

23 This graph illustrates that as the  
24 soil test phosphorous increases, so does the risk  
25 to P lost to surface water. And it also shows

1 that when the soil testing P levels exceeded 60  
2 ppm, that the P loss occurs at an accelerating  
3 rate.

4 This observation is supported by  
5 extensive phosphorous loss studies conducted in  
6 the Unites States, some of which can be found in  
7 the U.S. Department of Agriculture Handbook,  
8 Agriculture Phosphorous and Eutrophication, Second  
9 Edition. And I have a spare copy of that, if you  
10 would like.

11 This next graph was -- I was really  
12 surprised at the answers that come out of my  
13 investigation. I was really surprised. And what  
14 this graph is showing is, I did calculations as to  
15 the hog industry's share of the total load to Lake  
16 Winnipeg from all sources. Their share of the  
17 total load to Lake Winnipeg from all Manitoba  
18 sources. And their share of the P load from  
19 agricultural sources. So that's what these three  
20 graph lines are representing.

21 When I -- when I got the 15 ppm rate,  
22 which is the Manitoba average, the total  
23 contribution to the lake from the hog industry was  
24 0.97. It would be right on their one percent.  
25 Their total contribution from Manitoba is 2.1.

1 And their percentage of the contribution is 6.4.  
2 Now, that was interesting. Actually, the 742  
3 acres represents 6.3 percent of Manitoba's  
4 cropland. So that was the first percentage that I  
5 found real interesting. As well as matching their  
6 one percent estimation, it also matched the  
7 percentage of acres that they are using.

8 And then when I moved up the scale, I  
9 won't do them all, at the 120 ppm, they would be  
10 responsible for 7.7 percent of the total load to  
11 the lake. And 16.5 percent for the total load for  
12 Manitoba. And 50.9 percent for the total  
13 agricultural load. And so their 6.3 percent of  
14 acres are contributing 50.9 percent of the AG load  
15 to the lake, according to these calculations that  
16 I did.

17 The estimates are a simplistic best  
18 case scenario. The amounts of P accumulation and  
19 transport are, obviously, more complicated. This  
20 is particularly true when soil test P for given  
21 cropland increases in a non-uniformed way of  
22 lands, which have distinct topography, soil  
23 textures and productivity.

24 The estimates presented suggest that  
25 the threshold levels of the recently enacted

1 phosphorous regulations are excessively high,  
2 allowing the hog industry to apply manure when  
3 soil test P is 180 ppm, or 828 pounds of P2O5 per  
4 acre, constitutes nothing less than a license to  
5 pollute.

6           And I note that, although these rates  
7 of percentages that I have used for calculations,  
8 the same method can be applied to other  
9 agricultural land uses. So if you have the  
10 information from cattle, chickens, vegetable  
11 growers, whatever, if you had the right  
12 information, you can do the calculations for them,  
13 as well.

14           The next slide was very interesting,  
15 because it was information presented to this  
16 hearing. And you can find it on their website.  
17 And it is as stated by Manitoba Pork Council in a  
18 presentation and posted on their website. And  
19 they give scenarios for their N. The manure  
20 management province wide and their P. And they  
21 didn't give you the answer. So a person has to  
22 use the calculator to figure out what they were.  
23 So that's what I have done.

24           So that on their management of their  
25 nitrogen, they claim to use 300,000 hectares. And

1 then the nitrogen application rate of that would  
2 be 99.5-kilograms per hectare.

3 But they also presented another series  
4 of numbers describing P. And they stated it as:  
5 The proper rate for crops will be 15 kilograms per  
6 hectare and it would require 744,000 hectares. So  
7 what that's telling me is, when you do the math,  
8 the Manitoba Pork Council requires 2.4 times more  
9 land, or an initial 444,000-hectares, to  
10 sustainably manage phosphorous. And that's their  
11 numbers, not mine.

12 And in -- actually, their own  
13 statistics indicates that the hog industry has  
14 been applying 24 kilograms a hectare of surplus  
15 phosphorous to their 300 hectares used for the  
16 phosphorous application. At these surpluses, the  
17 phosphorous regulation thresholds can be reached  
18 in a short period of time. They will reach the 60  
19 ppm threshold in 5.6 years. The 120 ppm threshold  
20 in 11.2. And the 180 ppm threshold at 16.8 years.

21 It appears that the high threshold  
22 levels allowed by regulation were necessary to  
23 accommodate the surplus phosphorous that had  
24 already accumulated in the manure fields.

25 THE CHAIRMAN: You have five minutes,

1 sir.

2 MR. BARON: I might make it.

3 The hog industry has been using  
4 unsustainable manure management practices for 10  
5 to 15 years. The N based application rates have  
6 led to P accumulation. The P loading to Lake  
7 Winnipeg will increase under current management  
8 practices.

9 And we should use the land base to  
10 management N and P in a sustainable agronomic  
11 manner.

12 We should use economics of manure  
13 management in a study instead of using the waste  
14 bucket approach.

15 There should be rewards for good  
16 stewards of the land, and stiffer penalties for  
17 the ones that aren't regarding monitoring and  
18 enforcement. Saying that the Manitoba regulations  
19 are amongst the most strict in the world does not  
20 make them sustainable. More often than not, farm  
21 economics dictates producer behaviour, rather than  
22 a commitment to environmental stewardship.

23 The next slide is a picture of the  
24 infractions that have occurred in the hog industry  
25 for the six-year period stated: 115 prosecutions,

1 398 warnings, 231 orders. And I don't believe  
2 this is a good record of compliance with the  
3 regulations by the hog industry. It is contrary  
4 to what they are telling us.

5           The Manitoba hog industry needs to  
6 operate in an environmentally sustainable manner.  
7 Current Manure Management Regulations do not  
8 present a sustainable benchmark. For  
9 science-based Manure Management Regulations, the  
10 Manitoba's hog industry must not condone  
11 application rates that exceed the crop removal  
12 rate of N, P and other nutrients. Ineffective  
13 monitoring and enforcement of manure application  
14 regulations has contributed to current problems in  
15 Manitoba's hog industry.

16           Future directions, nutrient thresholds  
17 must be based on the ability of crops to use  
18 nutrients. Consider residual nutrients applied in  
19 previous years and not just the holding capacity  
20 of the soil.

21           Conduct field tests and publicize  
22 results on an ongoing basis.

23           Acquire funding to assess and monitor  
24 P transport risks throughout the province.

25           Ensure accountability of regulators

1 and producers.

2 The hog industry requires a minimum of  
3 2.44 times the area currently used to stop P  
4 accumulation of Manitoba soils and prevent P  
5 loading of Manitoba water resources.

6 I think it would be good to point out  
7 that that 2.44 will not lower the phosphorous  
8 loadings on the soils already there. It will just  
9 maintain them at that level.

10 It should maintain a proactive  
11 approach. Maybe the old adage is true: When you  
12 find yourself in a hole and it keeps getting  
13 deeper, maybe it is time to quit digging.

14 Thank you.

15 THE CHAIRMAN: Sir, are you going to  
16 be providing us with more information than just  
17 these slides?

18 MR. BARON: What would you like?

19 THE CHAIRMAN: Well, your calculations  
20 are very interesting. And perhaps it is just a  
21 matter of knowing how you arrived at them, like  
22 the 2.44?

23 MR. BARON: Well, I could have done  
24 all of that, but you didn't want me to talk for an  
25 hour.

1 THE CHAIRMAN: Well, you requested a  
2 half an hour time, and we have a full slate this  
3 afternoon.

4 MR. BARON: Yes, I will provide them.  
5 But it is very difficult to present. You have to  
6 sit down and look at it.

7 THE CHAIRMAN: Well, if you could give  
8 it to us either today, or in the next little  
9 while, we will have a look at it. And then if we  
10 need more explanation, we will get in touch with  
11 you.

12 MR. BARON: Okay.

13 THE CHAIRMAN: About how you arrived  
14 with these.

15 MR. BARON: Do you want something with  
16 the text on it sent to you, too?

17 THE CHAIRMAN: Yes, that would help,  
18 sir.

19 MR. BARON: That might work. I just  
20 have to talk to my computer expert. Can I just  
21 pull this out?

22 MS. JOHNSON: Yes.

23 MR. YEE: Mr. Baron, just a couple of  
24 questions for clarification.

25 MR. BARON: Okay.

1                   MR. YEE: And I should probably just  
2 wait until I see your calculations here. But I  
3 was just wondering, in terms of your calculations  
4 for the contributions to Lake Winnipeg, do they  
5 include the variation and existing phosphorous  
6 content of soils of the areas that you have looked  
7 at?

8                   MR. BARON: It's a provincial-wide  
9 look, and that's all I can do.

10                  MR. YEE: So you are not specifically  
11 looking at what's already in the soils, as far as  
12 the phosphorous content goes?

13                  MR. BARON: Okay. There is the first  
14 calculation that I did. And that was basically  
15 the old numbers in Lake Winnipeg Stewardship  
16 Board, which was 937 versus 1,200 now, and 6,600  
17 versus 7,900. But it was interesting that the  
18 percentages always came out the same. But what I  
19 did do in that first calculation, as I -- as  
20 the -- like after 30 ppm, as the increases went  
21 up, I took those increases and added to the totals  
22 before I did the percentage contribution, to be  
23 fair, to keep the numbers lower, but they are  
24 still very significant.

25                  MR. YEE: Right. And does the -- do

1 your calculations also include the availability of  
2 phosphorous in its various forms? When you  
3 calculate what's entering into, or potentially  
4 entering into the surface water system to Lake  
5 Winnipeg, do you factor in the availability of  
6 phosphorous?

7 MR. BARON: It's all supposed to be  
8 soil test P.

9 MR. YEE: Okay. And then, I guess,  
10 one last question.

11 MR. BARON: Do you want the formula?

12 MR. YEE: No. That's okay. I am sure  
13 you are going to give it to us. That's what I'm  
14 waiting for. I am probably asking questions a  
15 little out of order here. If I saw your formulas,  
16 I would probably know where you are coming from.  
17 Just one last question. You mentioned that there  
18 should be incentives to motivate compliance. Did  
19 you have anything in mind, in particular, as far  
20 as incentives?

21 MR. BARON: Well, my belief, to me,  
22 there has to be some good conscientious producers  
23 out there. There has to be. But I know that  
24 there are some abusers, as well. And there is  
25 evidence to support that. They didn't care.

1 Just: I am going to do this and be damned. I  
2 have got to make some money.

3 So, to me, on the enforcement side,  
4 they should recognize and support the good  
5 fellows, maybe less frequency of soil testing.  
6 But the ones that are pushing the limit, just  
7 start pushing them a little more. You've got to  
8 do deeper tests. You've got to do it more often.  
9 If you still don't do a good job, you've got to do  
10 12-foot soil samples. Make it a decentive to  
11 break the law.

12 I don't know what the fines are, but I  
13 just did a rough calculation in my head. If a  
14 producer was supposed to use 600-acres to apply  
15 his manure, and he was able to apply it on 500,  
16 and the cost of application is \$10 an acre, he  
17 saved himself \$1,000. And if a fine is only \$500,  
18 what are you gonna do?

19 MR. YEE: Thank you, Mr. Baron.

20 MR. BARON: It's economics.

21 MR. MOTHERAL: I am looking forward to  
22 hearing more information on it. I mean, we are  
23 getting varying opinions on levels of phosphorous.  
24 And it's something our committee is -- we have  
25 still got lots of work to do on understanding the

1 whole thing.

2 MR. BARON: All right.

3 THE CHAIRMAN: Thank you very much,  
4 Mr. Baron. We will take a 15-minute break. And  
5 because we have a full schedule, I am going to  
6 hold sharp to that, so we will resume at 25 after.

7 (PROCEEDINGS RECESSED AT 3:10 P.M. AND RECONVENED  
8 AT 3:15 P.M.)

9 THE CHAIRMAN: Could we come back to  
10 order, please? Please take your seats? We don't  
11 have any room to spare this afternoon, so I would  
12 like to get going. Mr. Mike Waldner.

13 We have a full schedule for the rest  
14 of today, so we are going to have to be pretty  
15 strict on the time limits. Sir, could you please  
16 introduce yourself for the record?

17 MR. WALDNER: My name is Mike Waldner  
18 from Cool Spring Colony Farms, the hog manager.  
19 I have been in the hog business since 1967,  
20 January, and I have seen a lot of changes in the  
21 hog industry since I started working with hogs. I  
22 started with the wheelbarrow and the shovel. At  
23 time pigs had a smell. Today, we run a state of  
24 the art industry. I sometimes wonder if the  
25 smell -- you have to walk into the barn, if there

1 is pigs present you have got to hear a squeal.  
2 And I think we have come along way in the hog  
3 business, raising hogs, and I see the industry is  
4 in the right direction.

5 THE CHAIRMAN: Could you administer  
6 the oath.

7

8 MIKE WALDNER, having been sworn, presented as  
9 follows:

10 THE CHAIRMAN: Go ahead, sir.

11 MR. WALDNER: Good afternoon members  
12 of the Clean Environment Commission, panel, and  
13 ladies and gentlemen of the audience. My is Mike  
14 Waldner and I stand here today as a representative  
15 of the Cool Spring Hutterite Colony. Our colony  
16 is located 12 miles northeast of the town of  
17 Minnedosa in the Rural Municipality of Minto. Our  
18 Colony has 83 members which make up 21 families.  
19 Hog production is a core business activity which  
20 supports our Colony.

21 We are a 570 sow farrow to finish  
22 operation which markets approximately 14,000 hogs  
23 annually. 450 of our sows produce hogs that we  
24 sell to Maple Leaf Foods in Brandon under a  
25 contract arrangement through the Canadian Quality

1 Assurance Program. The remaining 125 purebred  
2 sows are used to produce female breeding stock for  
3 the Cool Spring Colony Farms and 30 family run hog  
4 farms in Manitoba.

5 Hog production requires skilled and  
6 trained people looking after various aspects of  
7 the operation, including animal health, welfare,  
8 nutrition, as well as health and safety. The Cool  
9 Spring hog operations is managed and operated by  
10 certified pork production technicians, approved by  
11 the Assiniboine Community College. We have  
12 members who have a trucker quality assurance  
13 certificate, and a hydrogen sulfide awareness  
14 certificate. One of our members has received  
15 training from McKay GENSTAT Consultants  
16 Incorporation in the use of real time ultrasound  
17 equipment, which is used to gather loin and back  
18 fat measurements from animals in a safe,  
19 non-invasive way. We use this technology to help  
20 us make better decisions when it comes to  
21 selecting animals for breeding stock.

22 I would now like to paint an economic  
23 picture about the importance of the hog industry  
24 in Manitoba. When the subsidies for the  
25 transportation of grain to the ports were

1 rescinded in the 1990s, farmers on the prairies,  
2 and particularly Manitoba, were most affected.  
3 When you combine this with rising input costs and  
4 flat commodity prices over the last 30 years,  
5 there is no profit to be made in selling crops.  
6 While average household incomes have grown several  
7 fold in Manitoba, the agriculture commodity prices  
8 have remained stagnant. Is it any wonder that the  
9 so-called family farm has shifted into livestock  
10 production and grown substantially in size just to  
11 survive? Our Colony has also become more aligned  
12 on our hog production to generate revenue to  
13 support our families.

14           Nutrient management: I believe that  
15 one of the reasons we are having these clean  
16 environment hearings is that there is a lot of  
17 concern about the potential impacts of an  
18 expanding hog industry on the health of our soil  
19 and water in terms of nitrogen and phosphorous  
20 levels. To this day, it is not clear to me why  
21 the hog industry would be singled out in this  
22 review, since all aspects of agriculture can  
23 generate nutrients. For that matter, so can other  
24 industries, humans, and nature itself, and we can  
25 see the combined effects from all of these other

1 sources in the quality of water bodies like Lake  
2 Winnipeg. But the point I want to make here is  
3 that the hog industry is being proactive in the  
4 way we manage our manure to reduce nutrient  
5 loading on agriculture land. For example, six  
6 years ago Cool Spring Farms consulted with J&R  
7 Livestock Feed from Winnipeg to look at ways to  
8 reduce phosphorous levels in our manure. By  
9 adding a feed additive called phytase into our  
10 rations, we have been able to reduce phosphorous  
11 levels by as much as 30 per cent. Phytase is a  
12 natural enzyme used to decrease the need for  
13 calcium phosphate supplements, which has a  
14 positive effect on the environment by reducing the  
15 volume of manure produced and phosphorous  
16 produced.

17 At our colony, regardless of the  
18 source, nutrients from commercial fertilizers or  
19 manure are valuable and necessary inputs for crops  
20 and forage production. We can not and do not want  
21 to misuse them, and we do not want to risk losing  
22 them unnecessarily to the environment.

23 Manure management: It seems odd that  
24 the province would place a moratorium on hog  
25 expansion after it has worked so hard to put

1 regulations in place to guide the industry in the  
2 way we store and handle our manure. I will use  
3 our colony as an example to highlight some of the  
4 positive impacts that these regulations have had  
5 on our hog production. Cool Spring Farms has two  
6 above ground manure storage tanks which can hold  
7 four million gallons of manure. This gives us  
8 enough capacity to hold the manure for one year  
9 between fall applications of manure. We have also  
10 reduced the amount of water consumption at our  
11 barns and therefore the volume of manure that we  
12 produce by converting from water nipples to water  
13 bowls. By doing this we save two litres of water  
14 per hog per day. We have a manure management plan  
15 as required by the Manitoba Livestock Mortalities  
16 and Manure Management Regulation under the  
17 Environment Act. Our Colony has been complying  
18 with these regulations and it costs approximately  
19 \$2,000 each year to pay for soil testing and  
20 professional services. We have been approved to  
21 use 4,273 acres for our own land for manure  
22 application.

23                   Liquid manure handling has changed a  
24 lot over the last ten years in the hog industry.  
25 Instead of service spreading, we are now injecting

1 the manure to take advantage of its nutrient  
2 value, to minimize odours and to reduce the risk  
3 of surface run-off after heavy rainfall events.  
4 We use a low disturbance shallow injection method  
5 for incorporating manure into the soil.

6 Mortalities: Under the Manitoba  
7 Livestock Mortalities and Manure Management  
8 Regulation, livestock operators are required to  
9 dispose of mortalities in an environmentally sound  
10 way. Here the hog industry has a few options for  
11 handling mortalities. Cool Spring Farms uses a  
12 three-stage composting site located in an area  
13 which is not prone to flooding, leaching, or  
14 surface drainage problems. The composting process  
15 breaks down the carcass quickly and cleanly with  
16 no odours and flies, and we can use the end  
17 product as a source fertilizer on the colony.  
18 Furthermore, we find that composting save us  
19 freight billing costs which are charged for  
20 mortality pickups.

21 Land use, planning and approval: In  
22 June 2005, Manitoba passed Bill 33, the Planning  
23 Act, which now requires that every planning  
24 district board of a municipal council prepare and  
25 adopt a development plan which must now include a

1 livestock operation policy. This regulatory  
2 requirement should increase public confidence in  
3 deciding on new hog operations. However, I  
4 strongly recommend that the province oversee the  
5 development these policies to ensure that they are  
6 fair, not specific to just the hog industry, and  
7 that they are based on science rather than  
8 personal biases.

9                   Currently the Cool Spring Hog Farm is  
10 located in a sparsely populated area of our  
11 municipality. The nearest designated residential  
12 area is the community of Polonia. The western  
13 zoning boundary of the community is located  
14 approximately two and a half miles northeast of us  
15 in the RM of Rosedale. Aside from the dwellings  
16 owned by the colony, the nearest occupied dwelling  
17 is located .9 of a mile from our barns and manure  
18 storage. Our barns and manure storage and  
19 composting compound are set back more than a  
20 hundred metres from property boundaries, road  
21 allowances and surface water courses, which  
22 exceeds the requirements laid out in the  
23 regulations.

24                   Groundwater quality: Good quality  
25 water is vital to the health of our pigs and

1 reduces the incidence of most health problems like  
2 scours. Groundwater is an important primary  
3 source of water for the many hog producers and  
4 colonies. Water testing, which is done by  
5 Northwest Labs, shows that we have a good quality  
6 groundwater supply at our colony. It is free from  
7 nitrates, bacteria and e. coli that, if present,  
8 could be harmful to our animals and our families.  
9 Despite its good quality, we still chlorinate it  
10 at two parts per million to ensure good health in  
11 our barns.

12 We are required to test the water in  
13 our well prior to manure application approvals can  
14 be given. When we apply our manure we maintain  
15 adequate setback distances from water wells and  
16 surface water courses to avoid leaching. We apply  
17 manure at proper agronomic rates and take into  
18 consideration things like residue concentrations  
19 of nitrogen and phosphorous in the soil, crop  
20 nutrient requirements, soil texture and the  
21 location of our aquifer. We regularly inspect and  
22 maintain our wells to be sure that pollutants  
23 cannot get in, and we sample and test our water  
24 for a wide variety of constituents including  
25 nitrates, bacteria and e. coli at Northwest Labs

1 in Winnipeg.

2                   Surface water quality: Surface water  
3 is an important source of water for some hog and  
4 livestock producers. If not taken care of, poor  
5 surface water quality can cause serious health  
6 problems like scours and contribute to algae and  
7 bacteria problems in our lakes and rivers. To  
8 prevent this problem, Cool Spring Farms uses an  
9 accurate and highly reliable manure handling and  
10 injection system. We use a manure pumping system  
11 to pipe our manure to its final destination  
12 instead of transporting it by tanks over our  
13 roads. This eliminates potential spills and  
14 odours which may occur during tank transportation  
15 of the manure. We have found that by using this  
16 pipeline system, our neighbors aren't affected by  
17 odours and therefore don't seem to notice when we  
18 are applying manure.

19                   We mark out our buffer zones and  
20 setbacks prior to manure application. We inject  
21 manure into the soil at appropriate rates to  
22 reduce potential surface run-off into surface  
23 water. We do not spread manure on frozen soil or  
24 during the winter period, so there is no risk of  
25 run-off in the spring. All of this is done in

1 accordance with the Manitoba Livestock Mortalities  
2 and Manure Management Regulations, one of the many  
3 newer regulations in place to protect the  
4 environment. How can then we, as pork producers,  
5 go wrong?

6           Soil quality: The land of Cool Spring  
7 Farms has been classified primarily as class two  
8 and three, with areas of class five and six, under  
9 the agricultural capability system. Class two and  
10 three soils are agricultural soils with mild to  
11 moderate limitations for annual crop production.  
12 Class five and six have major severe limitations  
13 for crop production and generally better suited  
14 for perennial crops or forages. These ratings of  
15 land use are carefully considered when we apply  
16 nutrients. In some instances, we may not be able  
17 to apply manure at all. Soil testing tells us  
18 what the residue nitrogen and phosphorous levels  
19 are in the soils, and we adjust our manure  
20 application rates so that applied nutrients helps  
21 us to achieve realistic yields in the target crop.

22           Groundwater supply: Water is a  
23 necessity for hog production and ground water is  
24 an important source of water for many hog  
25 production units in Manitoba. Water is required

1 not only for swine consumption, but is also used  
2 for barn cleaning and manure handling systems.  
3 Our groundwater supply comes from a 70-foot deep  
4 well in the Polonia Valley aquifer. We have a  
5 water rights license which allows us to withdraw  
6 15,000 gallons per day. We use approximately 10  
7 to 15,000 gallons per day, of which 3,000 gallons  
8 is required to clean our barn approximately four  
9 days out of the week.

10 We have adopted water conservation  
11 practices like the Lou drinker to minimize water  
12 losses in our feeder pigs. By monitoring our  
13 consumption, we have found that we use two litres  
14 less per water per day per pig than the  
15 conventional spring water nipple.

16 Odor: The biggest concern of all.  
17 Livestock odours are often viewed as a nuisance by  
18 the public and there have been complaints raised  
19 about it causing eye and throat irritation,  
20 headaches, nausea, and even anxiety and  
21 depression. According to the Ottawa Citizen  
22 newspaper, which obtained information from  
23 Agricultural Canada reports written before 2000,  
24 most health complaints come from barn workers.  
25 Under the Manitoba Work Place Safety and Health

1 Act, however, employers are required to provide a  
2 safe working environment for workers. So for barn  
3 owners this may include providing masks, good barn  
4 ventilation, and training to protect barn workers.  
5 Working in a barn, however, is not for everyone,  
6 since some people are more sensitive to odours  
7 than others.

8           Using our colony as an example, we  
9 have invested in gas detectors to check hydrogen  
10 sulfide and ammonia gas levels in our barns.  
11 There was a time when these levels were unbearably  
12 high for both animals and workers, but we started  
13 using a product called Soluzyme, and then later on  
14 a product called Maxizyme. These helped to reduce  
15 ammonia levels from 20 to 30 parts per million  
16 down to less than two parts per million. The  
17 manure has a lower volume of solids and our slurry  
18 seems to be more liquified, making it easier to  
19 pipe into our pipeline operation and to transfer  
20 it to our holding tank and ejection equipment. We  
21 also remove the manure from our barn more  
22 frequently to reduce the intensity of the odour  
23 and we have added pit ventilation to remove gas  
24 build-up. With these better management practices,  
25 we have healthier pigs and workers.

1                   We also went to some considerable  
2    effort to plant a shelter belt perimeter around  
3    our barn and manure storage to diffuse odours  
4    emitted from our barns and manure storage and to  
5    improve the appearance of our swine operation.

6                   Disease transmission: Disease  
7    transmission and control are important issues for  
8    the hog industry. We have seen the effects that a  
9    disease like BSE can have on the cattle industry,  
10   and Avian flu on the poultry industry. The hog  
11   industry is well aware that disease control is of  
12   paramount importance and we go to huge extremes to  
13   protect our animals and ourselves. Cool Spring  
14   Farms has been able to retain its high health  
15   status since it started in 1986 by keeping a  
16   strict biosecurity protocol for the barn. Workers  
17   must shower in and shower out of the barn, and  
18   workers who are in contact with other animals or  
19   have hauled hogs to the plants are required to  
20   stay out of the barn for at least 24 hours.  
21   Visitors are not allowed, no exceptions. Our hog  
22   transport truck is disinfected after each use and  
23   dried thoroughly before it is used again. We have  
24   a quarantine barn for incoming breeding stock and  
25   conduct odour tests and blood tests to check for

1 health problems. We have our own AI lab for AI  
2 collection which eliminates the need to bring in  
3 semen from outside AI sources or using outside  
4 boars for natural breeding. Mortalities are  
5 placed within the composting compound within 24  
6 hours for fly and bird scavenging control. We  
7 keep our barn clean by washing and disinfecting it  
8 after every pen of hogs goes through.

9           These biosecurity rules also help to  
10 protect the public and animals by eliminating high  
11 spread contact between humans and animals which  
12 can prevent the transmission of illnesses between  
13 species.

14           Climate change: Climate change has  
15 recently become a hot topic of discussion, if you  
16 will pardon the pun. I don't think we understand  
17 it well enough to know what the long term impacts  
18 will be on us, nor do we fully understand the  
19 extent to which our human activities are affecting  
20 global warming patterns. Greenhouse gas levels in  
21 the atmosphere have increased over the years. Is  
22 it a natural phenomena, or is this caused by human  
23 activities like burning fossil fuels and burning  
24 rain forests or both? And how will climate change  
25 affect the way we currently manage manure? Will a

1 few years of drought affect our soil tests and the  
2 rate at which we will apply manure on our land?  
3 Will a heavy rainfall over a long period of time  
4 cause nutrients to leach out of the soil? Will  
5 the government do any research in these areas to  
6 answer these questions and others related to the  
7 way we manage our operation?

8 That concludes my presentation for  
9 this afternoon, but before I step down, I would  
10 like you to carefully consider the implications of  
11 any decision you are making regarding the hog  
12 industry in Manitoba and this moratorium.

13 Approximately 1500 hog producers make their living  
14 and their homes here in Manitoba. A few of them  
15 are counting on an expansion or a new operation to  
16 survive. For many colonies, hog production is a  
17 core business activity which supports our  
18 families. I therefore urge you to be fair in  
19 making your recommendations. Thank you for  
20 listening.

21 THE CHAIRMAN: Thank you very much,  
22 Mr. Waldner. I would just point out that I was  
23 somewhat lenient with the time with you, and I may  
24 have to be a little tougher on other people this  
25 afternoon. Thank you very much for your

1 presentation today.

2 MR. WALDNER: Thank you.

3 THE CHAIRMAN: Patrick Prychun, would  
4 you gentlemen please introduce yourself for the  
5 record?

6 MR. PRYCHUN: I am Patrick Prychun.

7 MR. BOND: Jeff Bond.

8 PATRICK PRYCHUN and JEFF BOND, having first been  
9 sworn, presented as follows:.

10 MR. PRYCHUN: Good afternoon ladies  
11 and gentlemen and member of the Commission. My  
12 name is Patrick Prychun and I have been involved  
13 in the feed industry for over 15 years. I  
14 currently work for Standard Max Pro Nutrition of  
15 Winnipeg, working throughout Western Canada and  
16 the Dakotas.

17 Standard Max Pro Nutrition specializes  
18 in consulting, nutrition programs and swine  
19 management, primarily working with the Hutterite  
20 colonies across North America since 1886.

21 Many of us have been discussing our  
22 concerns and solutions regarding the new  
23 requirements being set out by our government.  
24 Today I would like to further discuss two products  
25 that have been highly recognized and proven

1 effective across Canada, Maxizyme Plus and  
2 MaxiCharge. Over the past two years we at  
3 Standard Nutrition have been working together with  
4 Nuvac Sciences de la Vie, which simply means life  
5 sciences, a leading company of biotechnology based  
6 in Quebec. Nuvac is committed to human and animal  
7 health, protection of the environment with the use  
8 of efficient biological products. They have  
9 currently invested over \$500,000 in R&D, providing  
10 data for phosphorous reduction, ammonia and odour  
11 control, solid liquification and others. R&D was  
12 recorded through manure analysis, soil testing,  
13 slurry and lagoon sampling, with the combined  
14 efforts of engineers, agronomists, veterinarians  
15 and the cooperation of the Provincial Government.

16 Maxizyme Plus is a product that  
17 consists of digestive enzymes and specific strains  
18 of live bacilli bacteria. This concept is to use  
19 the animal stomach and intestines as a means of  
20 transformation that would control the organic  
21 matters and change them on the way. These  
22 products may be used as an alternative or an  
23 addition to phytase.

24 Coming from the same product line,  
25 there is a similar product called MaxiCharge that

1 works directly in pits and lagoons. The bacteria  
2 in both of these products have been shown to take  
3 up soluble phosphate and nitrogen from the solid  
4 and liquid phase in pits and slurries, reducing  
5 the level of soluble phosphates. The bacteria use  
6 the phosphorous from the phosphate for the growth  
7 and so change the microbial cellular material.  
8 The level of phosphate applied to the land is  
9 reduced, therefore reducing phosphate run-off into  
10 aquifers. In fact, the enzymes transform manure  
11 phosphate into orthophosphate, a component more  
12 easily absorbed and assimilated by plants.

13 We can now confidently say that we  
14 have three ways to reduce phosphorous for  
15 producers. Number one is the reduction in overall  
16 feed usage. Through better feed conversions, more  
17 nutrients are made available to the pig for  
18 absorption, giving us better feed conversions.  
19 Number two is a better digestibility of soluble  
20 phosphorous and grains and protein. And number  
21 three is better assimilation by plants and soil.

22 Odour control: Waste and odour  
23 emanating from swine operations is a growing  
24 concern throughout the world. It has created a  
25 dividing wall between producers and their

1 neighbors, making it more difficult for producers  
2 to manage their farms. We have helped many  
3 producers reduce the odours emanating from their  
4 barns, thus improving their relations with their  
5 neighbors. At a previous CEC hearing where a  
6 scenario between producer and neighbour were  
7 fairly tense, the neighbour not only congratulated  
8 the producer, but also made comments that things  
9 have changed, and I quote "couple of hundred per  
10 cent compared to what we had before, we don't get  
11 that smell."

12 On a video that was produced by a  
13 Nuvac rep in Manitoba, there was a neighbour so  
14 curious to see the equipment out and working but  
15 couldn't smell any odours, he had to go and check  
16 it out for himself. Since working with producers  
17 over the last couple of years, we have seen many  
18 additional benefits using these products,  
19 benefitting both the producer and hogs.

20 In conclusion, my personal thoughts on  
21 imposing a ban for future barn expansion I feel  
22 would be detrimental to both producers and many  
23 businesses associated within the swine industry.  
24 I agree there needs to be proper guidelines and  
25 regulations regarding the hog industry and

1 environmental concerns. I certainly hope that  
2 through all of these meetings the CEC will come up  
3 with reasonable guidelines that will help and  
4 assist, not hinder the producer. Thank you.

5 THE CHAIRMAN: Thank you, Mr. Prychun.  
6 How widely used are these products?

7 MR. PRYCHUN: In terms of --

8 THE CHAIRMAN: What percentage of  
9 Manitoba farmers, particularly of a reasonable  
10 size, would use these?

11 MR. PRYCHUN: Currently, right now we  
12 have been working mainly, primarily with the  
13 Hutterite colonies in Manitoba. To be accurate, I  
14 think we are approximately 30,000 sows to 35,000  
15 sows farrow to finish on the colonies right now  
16 just in Manitoba. It is growing rapidly in  
17 Saskatchewan and Alberta.

18 THE CHAIRMAN: The use of your product  
19 is growing rapidly?

20 MR. PRYCHUN: Yes. It is also being  
21 widely used in Ontario, and I have introduced it  
22 for the last year to year and a half down in South  
23 Dakota, and we are getting some fantastic results  
24 and reports.

25 THE CHAIRMAN: The MaxiCharge in

1 particular, that works in pits and lagoons, what  
2 does it do? It helps reduce the phosphorous? And  
3 does it also, is it what is responsible for  
4 reducing the odour that you talked about on the  
5 second page?

6 MR. PRYCHUN: The MaxiCharge is, it is  
7 like a concentrated formulation of Maxizyme.  
8 Maxizyme Plus is a feed additive that is fed  
9 directly to the swine in the feed, and MaxiCharge  
10 is added directly to the pits and lagoons to  
11 increase -- if a producer has an existing solid  
12 problem, we establish and set up a program, a  
13 protocol to help the producer liquefy those solids  
14 in the lagoon, or if he has ammonia problem in the  
15 barn as well.

16 THE CHAIRMAN: So it is your, at least  
17 your corporate claim that by using MaxiCharge  
18 Plus, a farmer can eliminate a lot of the odour  
19 coming out of the lagoons?

20 MR. PRYCHUN: Yes.

21 THE CHAIRMAN: With or without a  
22 cover, does that make a difference?

23 MR. PRYCHUN: Makes no difference, no.

24 THE CHAIRMAN: So you still reduce the  
25 odour without even a cover?

1                   MR. PRYCHUN: Yes. I will just add  
2 this, it is even regardless of what type of diets,  
3 we found that if it is corn, barley, wheat, soy  
4 beans, it is irrelevant, the results are  
5 consistently the same.

6                   THE CHAIRMAN: And is it expensive?

7                   MR. PRYCHUN: To set up a program on a  
8 feed cost per pig, it will average about \$1.75 per  
9 hog marketed when you run it from a farrow to  
10 finish operation. We establish value at the  
11 producer to show that over and above the cost of  
12 the product, we try to show them between \$2 to \$5,  
13 depending on the market price of the hogs. And  
14 there is some things that we don't even put a  
15 value on. For example, we had a 10 million gallon  
16 lagoon, he had a second agitator. As they began  
17 to empty the lagoon out, he cancelled the second  
18 agitator. And they felt they reduced their  
19 agitation time by 35 to 45 per cent. So how do  
20 you put a price on that? I don't know. Wash  
21 time, we have shown many producers, through the  
22 use of the product, that it has helped reduce the  
23 wash time between 40 to 60 per cent, so we don't  
24 put a price on that.

25                   THE CHAIRMAN: Thank you. Edwin?

1 Wayne?

2 MR. MOTHERAL: Just one quick one.  
3 Has the product been tested? Like has it been a  
4 standard, is there some kind of protocol through,  
5 you know, has it been tested to be safe to the  
6 animals, or is it just something like a product  
7 coming from the United States or --

8 MR. PRYCHUN: No. Great question, it  
9 is 100 per cent natural.

10 MR. MOTHERAL: Okay, I am just asking  
11 that question.

12 MR. PRYCHUN: It is 100 per cent  
13 natural and safe. As a matter of fact, the  
14 manufacturer, the president of the company eats it  
15 himself. That is -- it is not harmful.

16 THE CHAIRMAN: What does it do to his  
17 manure?

18 MR. PRYCHUN: It is a great bowel  
19 cleanser.

20 MR. MOTHERAL: I think it is the same  
21 product we heard of before, and I think it did  
22 come from another Hutterite colony where they  
23 actually took a cup full of the stuff out of the  
24 lagoon and said you could drink it if you wanted  
25 to. Now, I don't know if that is --

1                   THE CHAIRMAN: I don't know if I would  
2 go that far. You may not want to answer this, but  
3 are there other similar products in the market,  
4 competing products, or is this relatively  
5 exclusive?

6                   MR. PRYCHUN: There is other products  
7 in the market. I have done a lot of work into  
8 trying to separate myself from the competitors in  
9 terms of what results can we distinguish from the  
10 competitor. So we have seen things like loin  
11 increases, where the producer has been able to  
12 capitalize on loin premiums. We have got some  
13 producers that will generate loin premiums per  
14 month, an average of an extra 15 to \$1,700 a  
15 month. We have done a very close calculation on  
16 overall feed usage on farm from farrow to finish.  
17 On an average herd that we have seen on a 800 sow  
18 farrow to finish, it is quite common to see  
19 somewhere between 17 to 24 tonnes of complete feed  
20 less used overall per month. And that is an  
21 average that I can provide --

22                   THE CHAIRMAN: So there are, you know,  
23 there are a number of factors that would reduce  
24 that \$1.75 per hog?

25                   MR. PRYCHUN: Absolutely.

1 THE CHAIRMAN: Thank you, gentlemen,  
2 very much.

3 Joe Freedy?

4 MR. FREEDY: Good afternoon my name is  
5 Joe Freedy. I am with J&R Livestock Consultants.

6 JOE FREEDY, having been sworn, presented as  
7 follows:

8 MR. FREEDY: I'm not going to be  
9 reading right off the documents that I gave you,  
10 I'm just going to try to give you guys an  
11 understanding of a couple of products. I'm sure  
12 you guys have heard a lot about phytase. I'm not  
13 sure how it was explained, but in cereal grains,  
14 the phosphorous, some magnesium, iron, calcium,  
15 are bound by a phytic acid. And the enzyme  
16 phytase, what it does is it released that bond,  
17 therefore the inorganic phosphorous and calcium,  
18 some amino acids are released and become  
19 available.

20 And what Mike from Cool Spring Colony  
21 was talking about, six years ago he was one of the  
22 first guys to start using phytase, long before it  
23 became acceptable in the industry. And today we  
24 don't make any products without the use of  
25 phytase. So, on a typical hog in the past, where

1 it would take on average 3.5 kilos of inorganic  
2 phosphorous to put him to market, by adding  
3 phytase we have reduced that down to 2 kilos, and  
4 we are doing it consistently on thousands and  
5 thousands of animals. So on a 800 sow farrow to  
6 finish operation, just by the use of the enzyme  
7 phytase, in one year they would use 30 metric  
8 tonnes less inorganic phosphorous on those hogs.  
9 So that would be that much less phosphorous going  
10 on to the field. So the enzyme basically unbinds  
11 those inorganic phosphorouses and makes them  
12 available. This product is now used throughout  
13 the industry.

14 My recommendation to you people would  
15 be that it would be something that I would --  
16 first of all, the science is indisputable. And  
17 I'm not sure exactly what percentage of the hogs  
18 in Manitoba are using it. We use it exclusively  
19 on every hog that we feed. My recommendation to  
20 you guys would be that you would make it a  
21 mandatory product that the industry would have to  
22 adapt, because by reducing the phosphorous going  
23 into the hogs by 35 to 45 per cent, and I think we  
24 can even get it lower than that yet, it would be  
25 probably a huge step in reducing the overall

1 amounts of phosphorous going in.

2           The second product that I wanted to  
3 talk about is Soluzyme. It is a similar product  
4 to what Patrick was talking about, MaxiZyme, it is  
5 actually the competition. It is made up of  
6 basically the same type of bacteria and enzymes.  
7 And what it does is it reduces the amount of  
8 solids in the feed. It is almost like, you know,  
9 Patrick used to sell Soluzyme and, you know, best  
10 description was he went to a farm where there was  
11 complete solids in the pit, he put in this product  
12 through the hogs, and a month later the pit that  
13 had crusty solids on looked like coffee. That was  
14 the result. So this liquid manure now is going  
15 into either slurry store or into the lagoon, where  
16 it is staying in a suspension, so when they are  
17 putting that manure on to the crops, injecting it  
18 into the field, you don't have a whole bunch of  
19 solids at the bottom and a whole bunch of liquid  
20 at the top. So when they are calculating out the  
21 nutrient requirements or what they are getting out  
22 of their manure, and the top half of the lagoon or  
23 slurry is basically water, so on the first hundred  
24 or two hundred or three hundred acres, they got  
25 water. On the second two hundred or three

1 hundred acres, they got all of the solids and  
2 nutrients coming out where they have agitated it  
3 up, so it is a complete imbalance unless the  
4 product is liquified and put into suspension. And  
5 that is what these products are doing.

6 And there is probably three companies  
7 that are selling products like that now. And the  
8 cost and benefit ratios are pretty well similar.  
9 It is basically similar product.

10 That is about all I have got to say.

11 THE CHAIRMAN: Thank you. Now, would  
12 you -- I think Mr. Prychun said that you could use  
13 Maxizyme, or in your case Soluzyme, in addition to  
14 or instead of phytase?

15 MR. FREEDY: I don't believe that.

16 THE CHAIRMAN: Well, I really was not  
17 trying to challenge any proprietary positions. Do  
18 you use them together or do you use one or the  
19 other?

20 MR. FREEDY: Phytase, the phytase that  
21 we use is a completely different enzyme than the  
22 bacteria and enzymes that are used in something  
23 like MaxiZyme and Soluzyme.

24 THE CHAIRMAN: So they should both be  
25 used?

1                   MR. FREEDY: They should be both used.  
2     The use of phytase is so overwhelmingly solid that  
3     for the last three years I don't have, I can't  
4     think of a producer that has not reduced his  
5     phosphorous, inorganic phosphorous going into the  
6     feed by 40 to 45 per cent. It is huge. It is a  
7     huge, huge amount. And this is something that  
8     wasn't done ten years ago, this is only like in  
9     the last five or six years. And I can't speak for  
10    the rest of the industry. However, the stuff  
11    works hands down, there is no more argument about  
12    it, it has been solidly proven for a few years  
13    already.

14                   Now, Cool Springs Colony, they are  
15    using 30 metric tonnes less inorganic phosphorous  
16    coming on to their farm every year that they used  
17    to put in. So that is not going on to the fields  
18    any longer. And phosphorous, I am understanding  
19    is the major concern here.

20                   THE CHAIRMAN: Thank you. Edwin?

21                   MR. YEE: I guess as a similar  
22    question that we asked Mr. Prychun, in terms of  
23    how wide of use is both the phytase as well as  
24    this Soluzyme?

25                   MR. FREEDY: I would say that the

1     phytase, in my case it is 100 per cent phytase.

2                   MR. YEE:  No, I'm thinking in terms of  
3     the number of hog producers in Manitoba?

4                   MR. FREEDY:  That are using phytase?  
5     In my case, I don't feed one without phytase.  So  
6     across Western Canada we are probably feeding  
7     60,000 sows farrow to finish, and all of those  
8     offspring are getting phytase.  There is not one  
9     of those hogs that are marketed without phytase.  
10    I can't speak for Maxi Pro or Feedrite or the  
11    other companies, whether or not they have adopted  
12    these practices, however, I think that the  
13    producers themselves are demanding it because they  
14    understand that they got to reduce the load of  
15    phosphorous going on to those lands.

16                  MR. YEE:  And in terms of the use of  
17    the Soluzyme product?

18                  MR. FREEDY:  I would say between the  
19    three companies that are selling these similar  
20    products, maybe 30 per cent are probably using it.  
21    That would be the combined.  That would be just  
22    like a guess.  Not everybody is using that, not  
23    everybody gets that yet.  But the phytase they are  
24    really getting.

25                  MR. YEE:  Thank you.

1 THE CHAIRMAN: You said at the  
2 beginning but I missed it, what company are you  
3 with?

4 MR. FREEDY: J&R Livestock  
5 Consultants.

6 THE CHAIRMAN: Thank you. Wayne?

7 MR. MOTHERAL: Just a comment on, it  
8 is interesting to note, I put that on my notes, it  
9 is another commercial. It is something that we  
10 will certainly be contacting feed industries and  
11 other people about these products, though.

12 MR. FREEDY: Well, the phytase is not  
13 a commercial, it is a reality. I mean, we have  
14 reduced the amount of phosphorous going into the  
15 grower and finisher and starter hogs by 40 per  
16 cent. So that is a reality. The Soluzyme and  
17 MaxiZyme, that might be a commercial. Okay, thank  
18 you.

19 THE CHAIRMAN: Thank you very much.  
20 Even if it is a commercial, it is still  
21 interesting to hear these alternative processes.

22 Scott Dick?

23 MR. DICK: My name is Scott Dick.  
24 SCOTT DICK, having been sworn, presented as  
25 follows:

1 MR. DICK: Thank you. My name is  
2 Scott Dick and I'm pleased to make this  
3 presentation on behalf of Elite Swine  
4 Incorporated, which is the hog production arm of  
5 Maple Leaf Foods. In 2006, Elite Swine was the  
6 largest hog management company in Canada with  
7 approximately 109,000 sows, and produced more than  
8 1.9 million markets hogs. Of these numbers about  
9 two-thirds of its production was in Manitoba.

10 I'm the manager of land and nutrient  
11 resources at Elite Swine and hold a degree in  
12 Agriculture. I'm a director on the Manitoba  
13 Livestock Manure Management Initiative and I am  
14 also a professional agrologist with the Manitoba  
15 Institute of Agrologists and on the registry as a  
16 certified manure management planner. Along with  
17 my team of two other manure management planners,  
18 we manage more than 110 active plans, representing  
19 about a quarter of the plans filed annually with  
20 the Provincial Government.

21 Delivering the nutrient program to  
22 each of these ESI hog sites is a rigorous process  
23 involving eight components. Firstly, for each hog  
24 site, we file a manure management plan with  
25 Manitoba Conservation. For each plan we make

1 submissions to Conservation an average of ten  
2 times a year. These submissions include the  
3 manure management plan itself, updates confirming  
4 the name of the applicator, the type of crop on  
5 the field, when we expect to be on the field. We  
6 also submit six to ten soil tests, update some  
7 cropping intentions, and finally a confirmation of  
8 application. So there is a lot of paperwork, and  
9 you will understand when I say that nutrient acres  
10 in a manure management plan are some of the most  
11 intensively documented and managed acres in the  
12 province.

13           It would be difficult to prepare an  
14 environmentally sustainable manure management  
15 plans were it not for the work that we do on site  
16 characterization. Using maps such as this one  
17 with base data from the Provincial Government, we  
18 can immediately see the various classes of soil we  
19 are dealing with. We know that Ag capability  
20 classes one to five are suitable for manure  
21 application, and classes six and seven and  
22 unimproved organics are not suitable.

23           As you can see on this site, the class  
24 five land delineated by the yellow polygon or  
25 ribbon is removed from the spread acres. The

1 spread acres are highlighted by the red boundaries  
2 in the slide.

3           When we look at other site  
4 characterization maps that show us water bodies  
5 and drains, they assist us in determining where  
6 additional setbacks may be required, and whether  
7 we need to take slope of the land into  
8 consideration, as we do with some of the till  
9 soils found in Western Manitoba.

10           In addition to studying the maps, we  
11 also do soil testing. This testing is done in the  
12 fall typically, a week or two prior to manure  
13 application. We conduct tests on every piece of  
14 land on which we intend to apply manure. The soil  
15 samples are sent to an approved lab, which then  
16 reports on residual values of nitrogen and  
17 phosphorous in each field. Soil tests must be  
18 submitted into Conservation prior to any  
19 application. In 2006, we soil sampled about 700  
20 fields which represented more than 85,000 acres.  
21 These samples are the ultimate check on  
22 sustainability, since if nutrient levels are too  
23 high, we will make adjustments in the application  
24 for the upcoming year.

25           By the way, Manitoba is the only

1 jurisdiction in Canada to require that this  
2 information be submitted to government each year.  
3 In Ontario this information is submitted only once  
4 every five years and only accounts for the  
5 phosphorous and not the nitrogen.

6 Based on the site characterization,  
7 target yields and lab results for our soil tests,  
8 we then issue a work order to our manure  
9 applicators. The applicator is given direction on  
10 where to put the manure and how much manure to  
11 apply. I don't know if you can read it, but it  
12 gives legal land description, the crop we intend  
13 to put on, the amount of gallons to put on, if  
14 there is any special setbacks that they need to  
15 leave in the field, and how many manure samples  
16 they need to take.

17 The fifth component is manure sampling  
18 and analysis. Our manure applicators follow  
19 specific protocols on how and when they should  
20 collect manure samples. They send these samples  
21 to an approved lab for analysis. In 2006 we sent  
22 more than 400 manure samples for lab analysis.  
23 You have heard the hog industry say we should rely  
24 more on science and less on emotion to determine  
25 the future of the hog industry. Well, in our

1 minds lab analysis is essential, since it provides  
2 proof that we can scientifically quantify the  
3 different nutrient levels.

4           Site visits are also an essential  
5 component of the work that my team and I carry  
6 out. These visits allow us to visually check that  
7 what we have written on the work order is  
8 accurately being carried out in the field. After  
9 the manure is applied to the soil, we then provide  
10 the grain farmer with a post application mapping  
11 report. This is an application map developed  
12 using global positioning systems, or GPS data  
13 logger. The GPS accuracy is within three feet,  
14 giving growers a precise understanding of each  
15 square foot of their field. If the applicator  
16 runs out of manure and was unable to complete the  
17 field, as you can see the northwest corner here,  
18 the grower knows precisely where he needs to come  
19 back and apply commercial fertilizer. The GPS log  
20 also shows the time of application, the exact  
21 location, the accuracy of the satellite tracking,  
22 and in most cases how many gallons were applied at  
23 each specific point in the field. We can see how  
24 custom applicators performed on the job site. Did  
25 they leave proper setbacks? Were there any misses

1 or overlaps? What time did the job start and  
2 finish? This type of documentation increases the  
3 grain grower's confidence in the application.  
4 Providing this report also decreases the  
5 likelihood of a farmer second guessing the  
6 application and adding extra nitrogen as a buffer.

7           The final step in our nutrient program  
8 is a post application agronomic and economic  
9 report. This report takes into consideration the  
10 manure analysis from the lab and the predicted  
11 losses in the nitrogen cycle. The output of this  
12 report is an agronomic summary of N, P and K that  
13 will be available to grow the next crop. This  
14 report takes into consideration the current  
15 fertilizer prices and assigns a value to the  
16 nutrients that have been applied to the land. In  
17 Western Manitoba, the vast majority of recipients  
18 of manure from Elite Swine sites pay for a portion  
19 of the nitrogen that they receive. We strongly  
20 believe that assigning value to the nutrients  
21 helps ensure the product is not treated as a  
22 waste, but rather the valuable commodity that it  
23 is.

24           We know that more and more grain  
25 growers are recognizing this, because as nitrogen

1 fertilizer prices continue to rise, our department  
2 is fielding many calls from producers wanting to  
3 have manure spread on their field.

4           So, as mentioned, these eight steps  
5 complement each other and together allow us to  
6 properly manage the manure produced at our hog  
7 operations.

8           I would like to speak now about how we  
9 are adopting best practices and new technologies  
10 to ensure environmental sustainability. Four  
11 years ago Elite Swine started adding phytase to  
12 all of our hogs diets. As said earlier, phytase  
13 increases the amount of phosphorous that the pig  
14 can digest from the feed grains, thus reducing  
15 phosphorous additions to the diet. This measure  
16 has been remarkably successful, reducing our  
17 output of phosphorous in the manure by between 20  
18 to 40 per cent. While phytase has been very  
19 successful in reducing phosphorous output, we are  
20 a bit frustrated that present CFIA regulations  
21 prevent us from making even further reductions.  
22 Table 4 of the Feeds Act stipulates minimum total  
23 phosphorous levels that must be present in the  
24 hog's diet. Until the CFIA modifies table 4 to  
25 take into account this enzyme, our nutritionists

1 will not be able to maximize the potential  
2 reductions in the amount of phosphorous excreted  
3 in the manure.

4 In this slide you will see the typical  
5 way of injecting manure to the land. The soil is  
6 cultivated and the nutrients are injected behind  
7 each shank. Liquid is delivered to the implement  
8 by a drag hose that is laid from the storage to  
9 the field.

10 In this slide you will see another  
11 type of equipment that is useful in areas where  
12 minimum tillage is practiced, or where we want to  
13 inject on grassland. These round discs kind of  
14 furrow into the nutrients causing minimal soil  
15 disturbance, which reduces moisture losses while  
16 still allowing the manure to rapidly enter the  
17 soil.

18 This slide shows an AerWay Toolbar  
19 that directly incorporates the nutrients into the  
20 top five inches of the soil. Direct incorporation  
21 of the nutrients allows us to greatly minimize the  
22 volatilization losses compared to dribbling or  
23 flat fanning the manure on the surface. It is  
24 different from injection in that the manure is  
25 worked into the soil immediately rather than being

1 delivered below the soil surface. Direct  
2 incorporation also helps us to maximize the  
3 nitrogen to phosphorous ratio due to more nitrogen  
4 being retained in the soil. This equipment has  
5 been also proved to be very effective in working  
6 manure on fairly steep slopes. About 85 per cent  
7 of our manure is injected or directly incorporated  
8 into the soil. About 15 per cent of our manure is  
9 dribbled on to the surface in the southeast corner  
10 of the province where odour is not a constraint,  
11 or where land conditions such as stoniness do not  
12 allow for these above technologies.

13 We are also storing manure more  
14 wisely. This is a schematic of a two-cell earthen  
15 manure storage. This type of storage has a  
16 primary cell of 25 to 30 per cent of the entire  
17 storage, which acts to settle out the solids. The  
18 more liquidy portion of the manure is then allowed  
19 to flow over into the secondary cell. This simple  
20 storage design has proven to be one of the most  
21 effective ways to concentrate the phosphorous into  
22 the small portion of the storage volume. That is  
23 significant because the producer can then more  
24 economically transport the concentrated  
25 phosphorous rich manure farther from the barn site

1 and apply the nitrogen rich manure closer to the  
2 barns and lands that tend to be utilized more  
3 often.

4 Elite Swine has been a leader in  
5 testing and using different types of covers on our  
6 earthen manure storages. We currently have more  
7 than 20 sites with straw covers. This technology  
8 was pioneered by the Prairie Agriculture Machinery  
9 Institute in Portage la Prairie and uses a straw  
10 blower to apply barley straw on to the storage.

11 We are also a rapid adopter of  
12 negative air pressure technology. This is a  
13 synthetic plastic cover pulled over the entire  
14 storage that is removed only to agitate or empty  
15 the storage. We currently have 13 sites with this  
16 type of cover and are finding it very effective in  
17 controlling odours. However, based on operating  
18 difficulties and expense, we recommend that this  
19 type of cover be used only on the secondary cell  
20 of a two-cell system.

21 Elite Swine recognizes that technology  
22 is only as good as the people using it. For that  
23 reason we put a lot of effort into training our  
24 applicators that apply manure to the land. For  
25 the past seven years, we have held annual manure

1 applicator meetings to talk about topics such as  
2 how to do proper manure sampling, how to keep  
3 proper records, what to do in case of a potential  
4 spill, and health and safety protocols. In the  
5 absence of training and certification courses for  
6 manure applicators in Manitoba, we are doing our  
7 best to raise the bar for applicators.

8           We also encourage our producers and  
9 partners to continually raise the bar regarding  
10 their environmental practices. One of the ways we  
11 encourage sound environmental practices is through  
12 the Elite Swine Environmental Stewardship Awards.  
13 Since 1999 we have annually recognized producers  
14 with outstanding practices in the areas of dead  
15 stock management, yardsite maintenance, animal  
16 husbandry, including humane treatment and  
17 handling, insect and rodent control, and of course  
18 nutrient management. The producers who win these  
19 awards are committed to operating their businesses  
20 in a way that ensures a healthy environment for  
21 their children and their grandchildren.

22           Lastly, I would like to make five  
23 recommendations for your consideration. In 2004,  
24 Manitoba Conservation added mandatory applicator  
25 certification into the Livestock Manure and

1 Mortalities Management Regulation. This  
2 certification has not yet occurred due to an  
3 amendment which was required in the Pesticides and  
4 Fertility Act. This amendment needs to be  
5 completed so that certification can occur.

6           Number two, injection or direct  
7 incorporation makes sense for minimizing nutrient  
8 losses and thus increases the nitrogen to  
9 phosphorous ratio and reduces odours during  
10 application significantly. The CEC should  
11 encourage all producers to adopt this practice on  
12 their annual land.

13           Thirdly, soil testing is one of the  
14 most influential pieces of information that a  
15 producer has to manage their fertility program,  
16 and yet it is estimated that less than 25 per cent  
17 of Manitoba acres are soil tested annually.

18 Currently only livestock operations greater than  
19 300 animal units are required by law to test  
20 annually. Encouraging all producers to implement  
21 this practice will go a long way in educating and  
22 changing practices on the landscape.

23           Fourth, phytase is a proven technology  
24 for reducing phosphorous excretion. It is also  
25 financially advantageous to adopt this technology.

1 All producers should be encouraged to use phytase  
2 and the Provincial Government should join in the  
3 lobby of CFIA on table four of the Feeds Act.

4 Lastly, the province should look to  
5 provide financial assistance of up to 90 per cent  
6 through the Environmental Farm Plan Program to  
7 assist producers who require larger storages to  
8 stop winter spreading. Ontario had a similar  
9 program called the Healthy Futures Program.

10 It is important that these funds are  
11 handled through a program such as the  
12 Environmental Farm Program, as the industry does  
13 not want to disrupt trade arrangements and trigger  
14 duties to be applied to our exported hogs.

15 That concludes my remarks. I would be  
16 happy to answer any questions that you may have.

17 THE CHAIRMAN: Thank you very much,  
18 Mr. Dick. This is the first time I have heard  
19 about the CFIA regulation. Why is that? What is  
20 their reasoning?

21 MR. DICK: The table was built I  
22 believe about 20 years ago, and it was put forth  
23 by industry, and the feeds industry, I believe  
24 about four or five years ago to change that table.  
25 At that point there was one, only one maker of the

1 enzyme phytase I believe, by BASF, and it was  
2 determined that it would give a competitive  
3 disadvantage or an advantage to only one company.  
4 At that point they decided not to change it.  
5 Since then there have been numerous amounts of  
6 lobbying and it still hasn't been changed. I know  
7 that the Provincial Government made a statement at  
8 the Manitoba Swine seminar earlier this year that  
9 they will take up the cause as well and lobby the  
10 Feds on this one.

11 THE CHAIRMAN: So there is no real  
12 reason for maintaining what CFIA has as a minimum  
13 phosphorous level in the hog? The hog can do well  
14 with less phosphorous?

15 MR. DICK: What they are regulating,  
16 and I'm not a nutritionist, but what they are  
17 regulating is total phosphorous in the diet, not  
18 the available phosphorous that the pig can have.  
19 With phytase we can increase that available amount  
20 and therefore we can lower the total amount  
21 without affecting the hog at all.

22 THE CHAIRMAN: This is just my own  
23 ignorance, I guess. At slide 20 when you talked  
24 about some of the -- that you can use the  
25 concentrated phosphorous rich manure further away,

1 so is that the stuff that is in the first cell?

2 MR. DICK: Yeah, the bottom of the  
3 primary cell has the most concentrated phosphorous  
4 product. Therefore, typically when we start  
5 emptying the storage, we will take that primary  
6 cell and try to haul it the furthest distance from  
7 the site.

8 THE CHAIRMAN: And the liquid has more  
9 nitrogen and less phosphorous?

10 MR. DICK: The liquid is consistent  
11 with a good amount of ammonia in it. It is just  
12 that the second cell contains a very small amount  
13 of phosphorous.

14 THE CHAIRMAN: Okay. And I actually  
15 meant to ask this of Mr. Waldner earlier. The  
16 cost of putting in these piping systems to take  
17 the manure wherever, the slurry, is that  
18 expensive? Is that costly?

19 MR. DICK: We currently don't have any  
20 underground pipe, I don't think, at any one of our  
21 sites. What most of our applicators use is a soft  
22 hose that they can roll up, and some of them can  
23 stretch up to three to four miles.

24 THE CHAIRMAN: The soft hoses can go  
25 that far?

1 MR. DICK: Yes, yes.

2 THE CHAIRMAN: We have heard similar  
3 presentations from others in the last few weeks,  
4 you know, the big companies, like your company and  
5 others, HyTek and Puratone and a number of the  
6 larger colonies are able to do all of these  
7 things, but when does it become cost effective, or  
8 how big an operation do you have to be to take all  
9 of the steps that you are taking? I mean, can a  
10 small operator do all of these things and still be  
11 cost effective?

12 MR. DICK: As an agronomist by trade,  
13 I think some of the fundamentals of soil sampling  
14 and manure sampling are extremely beneficial  
15 practice that I would say save producers money,  
16 because you can more effectively manage and spread  
17 those nutrients over more acres. Those two simple  
18 tests dictate pretty much the way the whole  
19 program is run. An individual producer may not  
20 need to go to all of this type of documentation  
21 that we do, but certainly having a soil test, I  
22 think it costs a little over \$100 to take a soil  
23 test, it costs about \$60 or \$70 to do a manure  
24 test. For the amount of nutrients that they are  
25 spreading on their field, the benefit is huge.

1 THE CHAIRMAN: Thank you. Wayne.

2 MR. MOTHERAL: Yes, thank you. Just a  
3 couple of questions, getting back to soil testing.  
4 You do several, lots of soil testing obviously, as  
5 you said in your presentation. Do you use GPS, do  
6 you soil test in the same particular area when you  
7 are wanting to find out what your phosphorous  
8 levels and your residual phosphorous levels are?  
9 I know in some areas that they do, they use a GPS  
10 system so you get a true reading of what that one  
11 spot is doing, rather than take a chance on  
12 variable within the field.

13 MR. DICK: Almost all of our soil  
14 tests are taken using GPS, more from a validating  
15 standpoint to we make sure we are in the right  
16 field, that we didn't hit any spots that may be  
17 inconsequent. We don't use the practice of  
18 benchmarking, which is what you are talking, we  
19 currently use a composite style, which is  
20 typically choosing about 16 random points on a  
21 quarter, and then the next year choosing random  
22 points again. In setting up what you are talking  
23 about benchmarking is something that we are  
24 looking at and probably eventually will go to. It  
25 takes quite a bit of work to set up where that

1 benchmark is going to be chosen, and you have to  
2 have someone very, very skilled and understanding  
3 those soils to do that type of a job.

4 MR. MOTHERAL: Another question on  
5 phosphorous, in all of the soil testing that you  
6 do, do you find any excess residual phosphorous?  
7 And the reason why I ask that is because we had  
8 many producers at our hearings yesterday who said  
9 that phosphorous is not a problem at all. In  
10 fact, the phytase is actually causing them some  
11 problems because they want more phosphorous.

12 MR. DICK: I would agree, we had a  
13 fight with some our producers in Western Manitoba  
14 when we built some of our barns because we wanted  
15 to add phytase, and they said we need more  
16 phosphorous, all of our soils are deficient. You  
17 asked whether we have any fields that are higher?  
18 Yes, I remember, you know, we have some fields  
19 that back in the '90s or '80s had a big gun type  
20 of an applicator used on them. And with a big gun  
21 or an irrigation gun, you end up having a lot of  
22 nitrogen that is gassed off and, therefore, quite  
23 a bit higher rates were put on at that period.  
24 So, yes, some of those fields are high.

25 MR. MOTHERAL: Just one more question,

1 I know that my time is running out. Does your  
2 company do any research on manure separation?

3 MR. DICK: We have done quite a bit.  
4 We have looked at some separation technology in  
5 Ontario. We've tested here in Manitoba as well.  
6 Separation, from what I have seen in a lot of the  
7 cases, does a very good job at pulling the solids  
8 out. As the manure is coming out of the barn,  
9 typically the phosphorous is dissolved in that  
10 liquid. It is not in the solids yet until it has  
11 been in the storage for an accumulated amount of  
12 time. So the separators that I have seen and that  
13 we have studied, you are right, pulled out a lot  
14 of solids coming out of the barn but very little  
15 amount of the phosphorous. Until you start adding  
16 flocculating agents and some other polymers, they  
17 haven't proven to be that effective. Although we  
18 continue to look and we find that there is some  
19 there that may be more promising such as a  
20 centrifuge.

21 MR. MOTHERAL: But your answer is yes?

22 MR. DICK: We are looking at quite a  
23 few, yes.

24 THE CHAIRMAN: Edwin.

25 MR. YEE: Yes, Mr. Dick, we noted

1 from an earlier presentation by Mr. Baron an issue  
2 of what depth soil samples are taken. I was just  
3 going to ask, in terms of, given that you made a  
4 recommendation that we should look at soil testing  
5 for even less than 300 animal units, what depths  
6 are you sampling at now and is there a  
7 significance in terms of the depths at which the  
8 samples are taken?

9 MR. DICK: We sample today at two  
10 different profiles, a zero row to six inch profile  
11 and a six to 25 inch profile. There are some  
12 soils possibly that do benefit and we do have some  
13 sites where we go deeper. But if a nutrient  
14 manager is working with that land on an annual  
15 basis and looking at it annually, they should be  
16 able to balance that nitrogen that they are  
17 putting down. If they are finding leaching below  
18 that soil, below that two foot, then they are  
19 probably applying too much and need to start  
20 scaling back.

21 MR. YEE: In terms of your  
22 recommendation about the soil testing, should it  
23 be done in various levels and based on the results  
24 go deeper if required?

25 MR. DICK: If required, yes.

1 MR. YEE: Thank you.

2 THE CHAIRMAN: Thank you very much,  
3 Mr. Dick.

4 Melvin Hofer, would you please  
5 introduce yourselves for the record?

6 MR. HOFER: My name is Melvin Hofer  
7 from Deerboine Colony Farms.

8 MR. HOMBACH: And I'm Peter Hombach  
9 for Osorno Enterprises in Winnipeg.

10 MELVIN HOFER and PETER HOMBACH, first being sworn,  
11 presented as follows:

12 THE CHAIRMAN: Go ahead.

13 MR. HOFER: Good afternoon everybody,  
14 my name is Melvin Hofer and I speak on behalf of  
15 Deerboine Hutterite Colony. Our colony which is  
16 located seven miles north from the town of  
17 Alexander in the RM of Daly has a population of 97  
18 people made up of 16 families. We farm  
19 6,500 acres and practice the concept of minimum to  
20 zero till. This is done for economical reasons.

21 Business operations within the colony include,  
22 hogs, dairy and beef cows, bison and poultry.

23 The core business activity which  
24 supports us is hog production. The hog business  
25 which we currently operate is a 800 farrow to

1 nursery, but because of inflations and production  
2 costs such as feed, machinery, cost of living  
3 extra, it has been necessary to upgrade and expand  
4 the operation from 800 farrow to finish in order  
5 to continue with our farming lifestyle.

6           As you have probably heard repeatedly,  
7 one of the key concerns with the hog industry now  
8 is manure management, how to safely and  
9 effectively treat and dispose of hog manure  
10 produced within the industry. Presently, the  
11 number of animal units on our farm is not  
12 considered a large animal unit, so it does not  
13 fall under the large animal unit guidelines of  
14 Manitoba Livestock Mortality and Manure Management  
15 Regulations. We are still considered a small farm  
16 enterprise.

17           After the hog expansion is completed  
18 our farm operation will be considered a large  
19 animal unit. We will then be required to have an  
20 effective manure management plan in place.

21           It has always been our goal to leave  
22 as little negative impact on the creation as we  
23 possibly can. It is our goal and duty to preserve  
24 the air that we breathe and the water that we  
25 drink. For this reason, we have embraced a green

1 concept of manure treatment as opposed to manure  
2 disposal. This concept leaves only two product  
3 streams that I'm reluctant to call waste streams,  
4 because they are not. One stream is that of  
5 treated waste water with the goal to have it  
6 cleaned up better than required for waste water  
7 treatment plants in Manitoba. The other product  
8 stream is called class A compost, a product that  
9 is called Nutriplenish and proven to rejuvenate  
10 top soil. This concept will now be described in  
11 greater details by Peter Hombach.

12 MR. HOMBACH: Thank you for the  
13 opportunity to present this concept here, and  
14 thank you to Deerboine Colony. This is the first  
15 attempt of which I am aware that a hog producer in  
16 Manitoba tries to leave as little and small an  
17 environmental footprint as possible.

18 Please allow me to introduce myself a  
19 little bit more, and also the company that I  
20 represent. I'm the president of Osorno  
21 Enterprises and of the Osorno Group. The Osorno  
22 group encompasses other companies. We are  
23 headquartered in Winnipeg. And very instrumental  
24 in the development of this concept has been one of  
25 our companies, EAS Engineering GMBH, which is a

1 German company, and we have been fortunate enough  
2 that the general manager of this German company  
3 happens to be someone with extensive manure  
4 treatment experience in Europe.

5 I for myself am by training a chemist.  
6 I have been a professor of engineering in the  
7 United States for 15 years prior to my immigration  
8 to Canada, which was in 1999. We have tried to  
9 convince our producers in Manitoba to use a green  
10 concept since. And it is part of the philosophy  
11 of our company to promote the concept of clean  
12 air, clear water and fertile soil.

13 As it applies to manure treatment, we,  
14 at least at this stage, are in no position to  
15 change barn practices. Meaning that the manure  
16 coming out of a barn will be, microbiologically  
17 speaking, under anaerobic conditions. Anaerobic  
18 conditions means that it is emitting hydrogen  
19 sulfide, it is emitting smelly mercaptanes, it is  
20 emitting ammonia, it is emitting amines, carbon  
21 dioxide and methane. It is simply a  
22 microbiological fact.

23 The concept that we have allows the  
24 pits to be discharged in more rapid sequence than  
25 commonly done, into a lift station which we keep

1 intensely aerated because we want to break  
2 immediately this anaerobic situation and convert  
3 it into an aerobic system, where we have a  
4 sufficient amount of oxygen present in the manure  
5 to continue or to start iaerobic microbiological  
6 processes.

7                   We have heard here just a while ago  
8 that in fresh manure phosphate is in the soluble  
9 form. I totally agree with that. That is in  
10 agreement with our observations. However, this is  
11 a consequence of the anaerobic conditions under  
12 which the manure is. Under iaerobic conditions,  
13 you begin to bind phosphate. So the cycle already  
14 begins there. One of the big problems with manure  
15 is the soluble BOD, to stay away a little from the  
16 Chinese of a scientist, BOD stands for biological  
17 oxygen demand, and it is the goal of the treatment  
18 to reduce it as much as it possibly can. This can  
19 be done iaerobically, so there is a good reason to  
20 start that step right there. We have in this  
21 initial step calculated hydraulic retention time,  
22 meaning the average time that the manure stays  
23 there, for roughly two or three days, which is  
24 about five or six times the residence time which  
25 sewage in an municipal wastewater treatment plant

1 would undergo. So this is more than sufficient  
2 time to get the process started that has to take  
3 place. The capacity that we have calculated here  
4 for the Deerboine Colony is way beyond their  
5 needs. It is for 72.3 cubic metres per day,  
6 definitely oversized. So that there is, as I  
7 said, plenty of capacity.

8           The gases about which we are largely  
9 concerned here is, as I said before, greenhouse  
10 gases. Carbon dioxide and methane immediately  
11 come to mind. What I really haven't heard much  
12 talk about is the cost of land application.  
13 Because as you land apply the stored manure, which  
14 is still the common practice, you convert the top  
15 soil into an anaerobic situation, the anaerobic  
16 situation of the manure that you applied, which in  
17 turn means that the organic carbon of the top soil  
18 serves as a carbon reservoir for additional  
19 greenhouse gases. This is an aspect that is  
20 hardly ever discussed. Deerboine Colony has  
21 decided to stop this vicious cycle by going into  
22 full treatment right away.

23           And also what I hardly heard discussed  
24 is the release of nitrogen oxide, which is a  
25 greenhouse gas with much less greenhouse gas

1 potential than others, with an average atmospheric  
2 life time of 120 years, and warming potential of  
3 296 compared to carbon dioxide with a greenhouse  
4 gas potential of just one. The material so  
5 pre-treated goes into the flocculation,  
6 coagulation step. We have just heard in the  
7 previous presentation that this is, speaking  
8 generally, a known process. We have gone at  
9 length with laboratory testing to find ideal  
10 material to do this. Can we possibly show a  
11 couple of slides here?

12           This is our concept of clean air,  
13 clear water, and fertile soil that we are  
14 following here. And as I just explained with the  
15 first step, we have here literally an aerated lift  
16 station, mainly to prevent the greenhouse gas  
17 release and get the material done right.

18           In step two, the flocculation  
19 coagulation step, the main accomplishment that we  
20 have here is that 75 per cent of the BOD load that  
21 we have in the raw manure, we can compress into 25  
22 per cent of the volume, meaning we have a major  
23 separation affect. The material then so separated  
24 follows then into two passways. The supernatant  
25 liquid goes for biological nutrient removal into

1 the type of wastewater treatment. We have  
2 significant experience with that. And the other  
3 stream, the 25 per cent of the volume containing  
4 75 per cent of the BOD load go into composting of  
5 this sludge material.

6 What I'm showing you here is the jar  
7 test done in the lab with coagulation material. I  
8 assume that you can very clearly see that we get a  
9 very dark sludge, low volume; a very high volume  
10 of material that is rather lightly coloured, and  
11 the separation takes place in an amazingly short  
12 time period. We are talking here five or ten  
13 minutes.

14 We have designed the system for the  
15 Deerboine Colony in a way that we allow here for  
16 30 to 35 minutes of separation time. So in case  
17 something goes wrong, we have plenty of time  
18 cushion. For the high-tech composting that we get  
19 out -- this was a pilot test that we did in the  
20 State of North Dakota ten years ago. You can see  
21 here two piles of compost. The NutriPlenish  
22 compost, meaning the composting technology that we  
23 use, you see on this darker pile without weed, and  
24 the City of Grand Forks told us that they are  
25 doing composting anyway and they didn't see a need

1 for this high-tech composting, so on the right you  
2 see for comparison their compost. Our compost is  
3 pathogen free. We know we went into the  
4 composting process with a relatively high bacteria  
5 count. Windrow composting is never pathogen free,  
6 and the clear evidence is germination of weed  
7 seeds. NutriPlenish compost, simply because the  
8 compost at a temperature of 70 degrees C, within  
9 12 days the temperature is so high that all  
10 pathogens are cleared and all weed seeds. It is  
11 the material in which just beneficial  
12 microorganisms grow.

13 This an inside look into a composting  
14 facility. In this demonstration project, we have  
15 composted 20 tonnes of material in one shot. The  
16 oxygen, the atmosphere used in the composting  
17 process is partially oxygen depleted for safety of  
18 operation. The agricultural benefit was tested at  
19 North Dakota State University. Everybody in the  
20 agricultural business knows the famous rule of NPK  
21 fertilizer, nitrogen, phosphate and potassium.  
22 You see here with Durum in a greenhouse test, the  
23 standard NPK fertilizer and then here various  
24 rates of our compost with no additional  
25 fertilizer. I would like to say that

1 Dr. Chaihislic initially kind of almost refused to  
2 do the test because he said, you don't have enough  
3 phosphate in there, no nitrogen to speak of. The  
4 amazing fact is that when the microbiological  
5 mixture is right, you don't need those  
6 concentrations, the composting process does it  
7 all.

8                   And those are all of the steps that  
9 need to be taken. I did not want to go into too  
10 much scientific detail in my presentation. The  
11 Commission has 13 pages of material containing  
12 more details than I was giving here. And other  
13 than that, I thank you for listening, and if you  
14 have questions, which actually I hope you have,  
15 then I'm glad to answer them.

16                   THE CHAIRMAN: Thank you. I may defer  
17 to my colleague, Mr. Yee, who is a scientist  
18 unlike me, and I may come back with other  
19 questions later on.

20                   MR. YEE: I guess essentially what you  
21 are proposing here is a wastewater treatment  
22 plant, separation of the solids from the liquid  
23 portion of the manure and transforming the solids  
24 into a compost, using flocculence as a separator?

25                   MR. HOMBACH: It largely is, however

1 it is a modified concept because manure, as it  
2 comes out of currently operating barns, is worse  
3 than normal municipal waste water and consequently  
4 requires special treatments, hence the  
5 modifications that I showed you.

6 MR. YEE: What would the capital costs  
7 of the system as well as the operating costs of  
8 the system be?

9 MR. HOMBACH: In terms of capital cost  
10 for a system of the size that we here just  
11 presented, the fair market value would probably  
12 exceed \$1 million. It wouldn't exceed that very  
13 much, but this is a ballpark number. In terms of  
14 operating costs, we traditionally design systems  
15 to be as automatic as possible, so there isn't  
16 really much manpower attendance, but on the other  
17 hand you move here a lot of material which  
18 requires labour. And so this would be one cost  
19 component that we can not and have not really  
20 figured that out yet. In terms of electrical  
21 energy requirement, the largest compressors and  
22 pumps that we use are four to five kilowatt, so  
23 the energy cost is relatively moderate, plus there  
24 is a substantial gain in heat that is quite often  
25 overlooked in using this kind of composting

1 process. As I said, we typically operate  
2 composting close to 70 degrees C. This heat is  
3 biologically generated, it is not externally  
4 introduced heat.

5 MR. YEE: In terms of the cost of the  
6 flocculents, I gather that you are using polymers  
7 as the flocculent?

8 MR. HOMBACH: This is a combination of  
9 inorganic and organic material, and those are  
10 easily available commercial products.

11 MR. YEE: Thank you.

12 THE CHAIRMAN: Wayne?

13 MR. MOTHERAL: So where is this  
14 technology at right now, Mr. Hombach?

15 MR. HOMBACH: This technology is right  
16 now at the stage where the composting component  
17 has been shown to work perfectly on a relatively  
18 large scale, meaning in 20-ton batches in a two  
19 year demonstration project that we did in North  
20 Dakota ten years ago. You can see here in this  
21 jar that I brought with me a remnant of those  
22 times. What you see there is compost that was  
23 done with 70 per cent manure content, actually  
24 Manitoba manure content. And the wastewater  
25 treatment component, that is a business in which

1 we have been in for a very long time, but it has  
2 never been applied to the hog industry yet. And I  
3 would like to express my gratitude to the  
4 Deerboine Colony for taking the step to produce no  
5 secondary waste.

6 THE CHAIRMAN: So when do you expect  
7 to have this up and running at Deerboine?

8 MR. HOMBACH: As soon as possible.

9 THE CHAIRMAN: Is that six months, or  
10 a year or two years or --

11 MR. HOMBACH: The target completion  
12 date is before winter sets in.

13 THE CHAIRMAN: Before winter, this  
14 coming winter, '07?

15 MR. HOMBACH: Yes.

16 THE CHAIRMAN: And the compost, is  
17 this strictly a compost or is it a fertilizer?

18 MR. HOMBACH: I always am reluctant to  
19 call compost a fertilizer.

20 THE CHAIRMAN: How would you use it,  
21 or how will Deerboine use it?

22 MR. HOMBACH: I cannot speak for the  
23 colony, of course, but my sense is that the  
24 Deerboine Colony intends to sell this compost  
25 possibly back on the market, or otherwise use it

1 on their own fields. I think I already alluded to  
2 the fact that the compost is very different in  
3 composition and in impact with the top soil as  
4 compared with the manure application.

5 THE CHAIRMAN: Yes. Thank you, I have  
6 no further questions. That was an interesting  
7 presentation. Thank you for coming out today.

8 MR. HOMBACH: Thank you.

9 MR. HOFER: Thank you very much.

10 THE CHAIRMAN: And our last presenter  
11 in the afternoon is Jake Hofer.

12 MR. HOFER: My name is Jake Hofer from  
13 Treesbank Colony, and I'm here today to represent  
14 our colony.

15 THE CHAIRMAN: Sir, the other  
16 gentleman?

17 DR BAILEY: Dr. Loren Bailey. I don't  
18 think that I'm going to say anything except to  
19 answer your questions.

20 JAKE HOFER and LOREN BAILEY, having been sworn,  
21 presented as follows:

22 THE CHAIRMAN: Go ahead, sir.

23 MR. HOFER: Good afternoon, members of  
24 the Clean Environment Commission panel and ladies  
25 and gentlemen of the audience. My name is Jake

1 Hofer, and I stand here today as a representative  
2 of the Treesbank Hutterite Colony. Our colony is  
3 located one and a quarter miles from the Village  
4 of Treesbank, in the Rural Municipality of South  
5 Cypress. Our colony is comprised of 58 members,  
6 which is 11 families. Hog production is a core  
7 business activity which supports our colony. In  
8 addition to our 500 sow farrow to finish  
9 operation, we have 7,200 layer hens and 3,500  
10 broilers. We own approximately 4,000 acres of  
11 land and rent an additional 400 acres to grow feed  
12 we need for our animals.

13 Raising hogs is a full-time job for  
14 producers. This is because hog farms must  
15 consider the needs of the animals and the  
16 environment, as well as the farm's financial  
17 needs. Our farm is located -- our farms are more  
18 sustainable today because they are operated with  
19 better care and values than the generation that  
20 farmed before us. Farmers take this  
21 responsibility seriously and treat the environment  
22 with respect. Farmers rely on the land and water  
23 for their livelihoods and their lives, and it is  
24 in their best interests to protect their resources  
25 for the benefit of future generations.

1                   Like many other businesses, today's  
2 farms are bigger than in the past. You might ask  
3 why? There are numerous reasons, which include  
4 removal of grain transportation subsidies, rising  
5 input costs, stagnant commodity prices -- at least  
6 have been, they are going up -- and high consumer  
7 demand for low cost food. The end result is that  
8 farmers need to expand in size, diversify, or  
9 specialize in order to generate the same income  
10 that most people in this room have come to enjoy.

11                   Hog production is just one of the  
12 options that farmers consider when deciding what  
13 to do. Today hog production contributes about  
14 1 billion to Manitoba's economy, while providing a  
15 source of income for approximately 1,500 farm  
16 families, but economics isn't everything and is  
17 only one part of sustainable hog production. For  
18 example, hog producers work hard to produce safe,  
19 high quality pork, stay current with new farming  
20 practices, employ local people and businesses,  
21 protect the environment, follow a code of  
22 practices for the care of animals and workers,  
23 implement best management practices for many  
24 aspects of the farming operations, and lastly, to  
25 listen and understand the concerns of our

1 neighbors and the public. So let's talk about  
2 some of the concerns that you will hear in these  
3 hearings.

4           Manure: One of the byproducts of hog  
5 production is manure. Manure is environment's  
6 original fertilizer. Think about this for a  
7 moment, many years ago the buffalo herds roamed  
8 across the prairies dropping manure as they grazed  
9 the landscape. This manure added organic matter  
10 to the soil and provided nutrients for the plants  
11 and the microorganisms to grow. Today hog manure  
12 contributes the same valuable nutrients, namely  
13 nitrogen, phosphorous and potassium, needed by  
14 plants for growth, healthy roots, and disease  
15 resistance. The main difference now is that  
16 Manitoba's regulations require that we have better  
17 control on its application on the land to ensure  
18 that plants can fully benefit from it. We do this  
19 using technology, science, to understand the  
20 nutrient content of our manure and matching it to  
21 the needs of the crops, forages and grasses that  
22 we grow.

23           New manure storage facilities are  
24 required to comply with engineering standards and  
25 must be large enough to store the manure

1 throughout the winter months, until such time that  
2 the manure can be used and applied on the land.  
3 Some producers use earthen manure storage  
4 facilities, some use pits, and some use silo type  
5 bins. But whatever is used must meet industry and  
6 environmental standards. And if an existing  
7 storage facility is expanded or upgraded, it too  
8 must comply with current provincial standards for  
9 manure containment.

10 As an example, when our colony decided  
11 to upgrade our earthen manure storage in the mid  
12 1990s, we were required to completely overhaul our  
13 lagoon by adding an additional compacted clay  
14 liner to the lagoon, which we did.

15 Our colony files an annual manure  
16 management plan with the Province of Manitoba.  
17 Our plan is prepared by AgriTrend Technologies.  
18 When it comes to disposal, all large operations  
19 are required to file a manure management plan in  
20 accordance with recent provincial acts and  
21 regulations. The plan must show where the manure  
22 is going to be applied, how and when it will be  
23 applied, the rate at which it is expected to be  
24 applied, the current nutrient level of the  
25 receiving fields, and the crops or plants which

1 will be grown on that field. This practice will  
2 reduce the risk of overapplying manure and reduce  
3 the risk of run-off or leaching. Depending on the  
4 nutrient content, manure may be spread at rates of  
5 around 4,000 gallons per acre, which is roughly  
6 equivalent to four millimeters of rainfall, or  
7 less than one quarter inch for those of you who  
8 still use the Imperial system of measurement.  
9 This is approximate application rates which we  
10 have been using at our colony.

11 Soil testing is an important component  
12 of manure and nutrient management planning. The  
13 soil testing is done by third parties. In our  
14 case, it is AgriTrend who then determines the rate  
15 at which manure may be applied to meet our crop  
16 needs. Now, when it comes to applying the manure  
17 on the field, we try to do it in a way which  
18 maximizes the benefits to the plants, which also  
19 keeping the odour to a minimum. Many producers  
20 use injectors or higher certified manure  
21 applicators to apply the manure at a proper rate  
22 and incorporating it into the soil within 12 hours  
23 to eliminate odours. Some applicators even use  
24 GPS technology to ensure that the manure is not  
25 applied twice in the same area.

1                   Currently our colony uses spread bar  
2 manure applicator, or the last year we have used  
3 spread bar because we couldn't get the applicator,  
4 as most of the other years we did incorporate it  
5 right into the soil. The goal of applying manure  
6 is to make sure it stays where it is applied.  
7 Farmers try very hard to ensure that accidents  
8 don't happen, and many have gone to great expenses  
9 to implement practices and technologies to remove  
10 the environmental risk.

11                   All of our practices are subject to a  
12 wide variety of federal, provincial and municipal  
13 regulations and bylaws. If we don't comply, the  
14 financial consequences of a fine can be enough to  
15 force change in our practices, or enough to force  
16 us out of business. If the public believes that  
17 the regulations are not enforced or that fines are  
18 never used, I have got news for them. Let me  
19 assure you that this is not the case. Speaking  
20 from firsthand experience, our colony was fined  
21 about four years ago for an unfortunate oversight  
22 related to manure application. This fine was  
23 enough for us to put the necessary safeguards in  
24 place to make sure that history would not repeat  
25 itself, and there we began with AgriTrend, or

1     shortly after.

2                     Environmental liability and risk  
3     management: The hog industry is expecting  
4     additional changes in Manitoba nutrient manure  
5     management regulations. So in preparation, hog  
6     producers have been incorporating several  
7     beneficial management practices or BMPs into their  
8     operations. An example of some of these practices  
9     at our Colony include regular soil and manure  
10    testing by independent third parties, namely  
11    AgriTrend; planting crops with high phosphate  
12    uptake; rotating manure applications on fields  
13    over several years rather than spreading on the  
14    same field year after year. Here AgriTrend keeps  
15    track of the fields. They have every field on  
16    their computer, same as our field man, and he  
17    correlates with them throughout the season with  
18    manure applied, and helps us to select the fields  
19    for our annual application.

20                    And finally, our colony has prepared  
21    an environmental farm plan. By completing the  
22    plan and getting a statement of completion  
23    certificate, we became eligible for some funding  
24    for making environmental improvements on our  
25    product.

1                   This is just a very short list of some  
2 of the BMPs that our colony has been implementing  
3 in our operation. For some hog producers, these  
4 BMPs can place a huge financial burden on farms so  
5 I expect the rate of expansion of the hog industry  
6 will slow down over the next few years because of  
7 this.

8                   Water quality and disease: Good water  
9 quality is essential to the health of the families  
10 of our colony and our animals. Hogs, particularly  
11 young pigs, are sensitive to poor water quality  
12 and can experience health problems if they don't  
13 have clean water. When we talk about water  
14 related health problems, we tend to think of  
15 bacteria like e. coli, and think of Walkerton.  
16 All mammals, including people, household pets and  
17 wildlife regularly excrete e. coli in their feces,  
18 not just agricultural livestock. The strain of  
19 bacteria which appeared in Walkerton is not common  
20 to pigs. This statement is not intended to  
21 diminish the importance of proper management of  
22 hog manure. It should however raise awareness in  
23 the public that we can come into contact with  
24 bacteria from a lot of sources, not just those  
25 that might be linked to agriculture.

1                   Some of the current beneficial  
2 management practices which our colony and the hog  
3 industry in general use to prevent bacteria from  
4 affecting our water quality include, soil testing  
5 to determine appropriate rates of manure  
6 application to prevent leaching and run-off,  
7 injecting or incorporating manure into the soil to  
8 reduce potential surface run-off, applying manure  
9 away from water bodies in accordance with  
10 regulatory setbacks, applying manure on fields at  
11 rates which match crop intake needs, siting  
12 livestock operations and manure storage facilities  
13 away from water bodies in accordance with  
14 regulatory and municipal requirements, no surface  
15 spreading of manure on frozen soils, increasing  
16 manure storage to permit holding the manure  
17 through a winter season.

18                   I guess I will be running out of time  
19 so I will skip the water supply.

20                   Odour: If you had to survey the  
21 public and ask them what they thought they  
22 disliked most about the hog industry, you would  
23 probably hear the aroma. Odours are a part of  
24 every livestock industry and the hog industry is  
25 not immune to it. Odours may come from barns,

1 lagoons, or the handling manure during disposal,  
2 but are usually most noticeable during the  
3 collection, stirring, transportation and disposal  
4 process.

5           If you live in the rural community or  
6 want to, you must come to expect some of the  
7 smells from the barn. But we as hog producers  
8 know that reducing odours is also a good thing.  
9 Under the Manitoba Livestock and Manure Management  
10 Initiative, as well as other Canadian -- as other  
11 Canadian initiatives, a lot of time and money has  
12 been invested in research to understand how and  
13 why manure smells, and how we can reduce odours.

14           I will just skip through the slide  
15 show.

16           In closing, I would like to say that  
17 our colony has become more responsible and  
18 concerned for our environmental needs as well as  
19 those of our neighbors. We cannot stress enough  
20 the importance of good public relations, so that  
21 the public can understand why we do things the way  
22 we do, but to also show that we want to hear their  
23 concerns. Our colony tries to host a hog barbecue  
24 every fall for our neighbors so that we can help  
25 improve relationships and to hear their issues.

1 We believe this to be very important.

2 I would like to thank the panel for  
3 allowing me to speak at this hearing and shed some  
4 light about the hog industry. I hope the audience  
5 will better understand the contributions that the  
6 hog sector is already making to protect our  
7 environment and that livestock expansion in  
8 Manitoba can take place in a sustainable fashion.  
9 Thank you.

10 THE CHAIRMAN: Thank you very much,  
11 Mr. Hofer. Edwin.

12 MR. HOFER: If there is questions  
13 regarding soil tests, Dr. Bailey is with AgriTrend  
14 and he is with us.

15 MR. YEE: No, just Mr. Hofer, just for  
16 clarification, you mentioned that you have  
17 4,000 acres of land and rent an additional  
18 400 acres. Is that sufficient for your spread  
19 fields for your manure from your hog operation?

20 MR. HOFER: More so, yes.

21 MR. YEE: The only other question that  
22 I have, again for clarification, is do you apply  
23 the land with injection and do you do it  
24 yourselves or --

25 MR. HOFER: This past season we were

1 practically forced, we were sort of forced, the  
2 timing was a little out with the applicator, so we  
3 had to do it with tankers, which we had to buy,  
4 and we used the flood bar system. And on some we  
5 did use GPS and monitoring with a portable unit,  
6 plus the fact we incorporated as rapid as possible  
7 after. But generally we have done the injection  
8 system.

9 MR. YEE: Thank you, Mr. Hofer.

10 MR. HOFER: I would like to make one  
11 more comment, that 80 per cent of our land is  
12 phosphate deficient, so it is not a real concern  
13 for us.

14 THE CHAIRMAN: Did you say deficient?

15 MR. HOFER: Deficient.

16 MR. MOTHERAL: Thank you,  
17 Mr. Chairman. My one question I think has already  
18 been answered. When Mr. Bailey was showing the  
19 slides, I saw an above ground storage tank, and I  
20 was going to ask you, is that -- you use that?

21 MR. HOFER: It is ours.

22 MR. MOTHERAL: So you have both then?

23 MR. HOFER: We have the two. There is  
24 three million in that storage tank, and then we  
25 have two smaller lagoons, so we have got

1 sufficient storage to just every fall apply  
2 manure.

3 MR. MOTHERAL: Was the above ground  
4 tank, was that a request from the municipality?

5 MR. HOFER: Our surrounding neighbors  
6 put the pressure on they don't want another  
7 earthen lagoon, and we decided to go with them.

8 MR. MOTHERAL: Thank you for telling  
9 me that.

10 AgriTrend has been mentioned several  
11 times. Is that a very common association with  
12 most Hutterite colonies?

13 MR. HOFER: There is quite a few in  
14 the surrounding area, Neepawa -- do you want  
15 Dr. Bailey to answer this?

16 MR. MOTHERAL: Hello. I haven't seen  
17 him for years, I don't know if he knows who I am,  
18 but he graduated a year after I did.

19 MR. HOFER: South of us, north of us,  
20 west of us, and I must say all directions of us,  
21 AgriTrend is around.

22 MR. MOTHERAL: We heard it several  
23 times. I don't mean that you are trying another  
24 commercial here or anything like that.

25 THE CHAIRMAN: Do you use phytase?

1                   MR. HOFER: No, not as yet, but if the  
2 pressure will come, we certainly would think of  
3 using it, yes.

4                   THE CHAIRMAN: Or any other enzyme?

5                   MR. HOFER: We have used these enzymes  
6 they were talking about, I think one name rings a  
7 bell. But at that time it was, and I'm talking  
8 ten years ago, we decided we can do without it.  
9 It was about \$2.50 a hog. It did work, I totally  
10 believe that the stuff works, but in those years  
11 it was sort of price prohibitive. We are thinking  
12 of trying it again.

13                  THE CHAIRMAN: Thank you very much.  
14 Thank you, gentlemen. That brings us to the end  
15 of the afternoon proceedings. We will reconvene  
16 at 7:00 o'clock.

17 (PROCEEDINGS RECESSED AT 5:20 P.M.

18 AND RECONVENED AT 7:00 P.M.)

19                  THE CHAIRMAN: Good evening, ladies  
20 and gentlemen. I would like to come back to  
21 order. We have a full slate for this evening, as  
22 well.

23                   I would just like to remind those of  
24 you who were not here this afternoon, I would ask  
25 that you turn off cell phones, please, or at least

1 turn off the ring tone. If you must take a call,  
2 I would ask that you leave the room.

3 And I would also ask that there be no  
4 conversations in the audience while people are  
5 making their presentations. And the first person  
6 to make a presentation on the agenda for this  
7 evening is Robert McKay.

8 MR. MCKAY: Good evening.

9 ROBERT MCKAY, having been sworn, presents as  
10 follows:

11 THE CHAIRMAN: Go ahead, sir.

12 MR. MCKAY: Good evening. Thank you  
13 for giving me the opportunity to speak at this  
14 hearing. As you know, I am Robert McKay. I am  
15 part owner and the principal scientific researcher  
16 for McKay GENSTAT Consultants, Inc., a small firm  
17 which provides carcass --

18 THE CHAIRMAN: Excuse me, Mr. McKay,  
19 could you please slow down for our reporter.  
20 She's having trouble keeping up.

21 MR. MCKAY: Sorry, it's the  
22 adrenaline.

23 We provide carcass evaluation,  
24 ultrasound probing and consulting services to the  
25 swine industry.

1 I have a Ph.D. in Animal Science from  
2 the University of Minnesota, with over 25 years of  
3 science and research with hogs, 15 with  
4 Agriculture and Agri-Food Canada, as a scientist,  
5 and ten years as a private consultant and  
6 researcher in my own company. I am also a  
7 registered member of the Manitoba Institute of  
8 Agronomists.

9 Over the course of my career, I have  
10 handled well over 100,000 hogs through the  
11 research I have conducted and the on-site services  
12 we provide to our clients. Over this same time, I  
13 have seen first-hand the vast improvements and  
14 changes in technology and education behind pork --  
15 the pork production scene, and the level of  
16 innovation and adaptability of the hog sector to  
17 produce safe, high quality pork in an  
18 environmentally sustainable fashion.

19 Pork is the primary meat which is  
20 consumed in the world. The primary consumer of  
21 pork, such as Japan, are also primary importers of  
22 our pork. Manitoba produces some of the finest  
23 pork quality or finest quality pork in the world.  
24 And we export about 80 percent of our production,  
25 much of which goes to the Unites States and Japan.

1 I now intend to describe some of the  
2 research, science and innovations which have taken  
3 place and help to support sustainable hog  
4 production in the context of some of the issues  
5 you have outlined for these hearings.

6 Manure management. One of the  
7 inescapable by-products of hog production is  
8 manure. It is one of those aspects of hog  
9 production which has received a great deal of  
10 attention in terms of regulation, research,  
11 technology and innovation.

12 The Manitoba Livestock Mortalities and  
13 Manure Management Regulation under the Environment  
14 Act is clear on how all livestock producers manage  
15 manure. Large operations are required to file a  
16 Manure Management Plan and test their soils and  
17 manure in order to determine proper application  
18 rates to balance crop needs with nutrient  
19 availability in manure.

20 Producers and custom applicators are  
21 now using portable nutrient measurement equipment  
22 to estimate plant-available nitrogen content in  
23 their liquid manure and to make better on-farm  
24 decisions about manure application rates. This  
25 technology is becoming more readily available and

1 reduce the wait time to get results back from the  
2 laboratory.

3 Currently, hog manure may be stored in  
4 concrete pits, above-ground tanks or earthen  
5 manure storage structures. Regulations and  
6 engineering standards for all new structures have  
7 become more stringent than before, thereby raising  
8 the bar for environmental protection.

9 On-going research is finding better  
10 ways of storing and managing hog manure. For  
11 example, the government is encouraging research of  
12 various technologies, like electromagnetic  
13 spectrometry, or EMS, for applications like  
14 locating areas of high clay content for  
15 constructing earthen manure storage. This  
16 technology can quickly assess subsurface  
17 conditions for site suitability.

18 Liquid manure handling has also  
19 changed over the past ten years. Surface  
20 application of manure is increasingly being  
21 replaced with injection to take advantage of its  
22 nutrient value, to minimize odour, and to reduce  
23 the risk of surface runoff.

24 Programs like the Manitoba Livestock  
25 Manure Management Initiative were set up in

1 response to public concerns over odour and manure  
2 management. The purpose of the initiative was to  
3 investigate:

4 "solutions that are scientifically  
5 sound, environmentally sustainable and  
6 economically feasible."

7 Since its inception, this initiative  
8 has funded studies and research on biofilters and  
9 innovative manure treatment and management  
10 practices. Some of the technologies and practices  
11 have shown merit and are being used in operations;  
12 for example, solid/liquid separators, covers for  
13 lagoons and computer controlled application of  
14 liquid manure.

15 As for the greenhouse gases, according  
16 to a discussion paper prepared by the Canadian  
17 Pork Council in 2002, "Greenhouse Gas Mitigation  
18 Strategy for the Canadian Hog Industry", Canada's  
19 average annual greenhouse gas emissions are  
20 approximately 694 megatonnes of carbon dioxide  
21 equivalent. Most of these emissions are tied to  
22 the burning of fossil fuels, like coal, gas, fuel  
23 oil, and natural gas. Agriculture, as a whole, is  
24 estimated to contribute 12 percent to Canada's  
25 total. Of this amount, the animal sector is

1 estimated to contribute five percent of Canada's  
2 total with manure from all livestock species  
3 estimated to contribute 1.4 percent of Canada's  
4 total.

5 Beneficial management practices, which  
6 are being used to help reduce these levels even  
7 further include:

8 Better manure application and storage  
9 management;

10 Better soil management;

11 Manure treatment;

12 Feeding strategies to reduce the  
13 production of nitrogen and phosphorous in manure;  
14 and,

15 Incorporation of shelterbelts and  
16 grasslands into the farming landscape.

17 There has been some work done in the  
18 use of nitrification inhibitors which, when added  
19 to manure, can inhibit the formation of nitrate  
20 from ammonium.

21 Changes in feeding strategies have  
22 also been found to reduce nitrogen excretion  
23 levels. When protein in the hog diet is more  
24 closely matched to the requirements of the animal  
25 during the various phases of growth, the amount of

1 excess amino acids excreted is reduced, thereby  
2 reducing the amount of nitrogen excreted. This  
3 can decrease the amount of total nitrogen excreted  
4 by as much as 50 percent, although 20 to  
5 30 percent seems to be quite typical if dietary  
6 protein is reduced by 20 percent. Protein  
7 reduction, however, is a balancing act, since it  
8 can also impact growth rates and development which  
9 can have negative economic and animal welfare  
10 repercussions.

11 Feed additives, such as phytase, have  
12 been getting some recognition for their ability to  
13 reduce phosphorous and sometimes nitrogen in  
14 manure. Phytase is an enzyme which breaks down  
15 phytate, a compound found in many feed  
16 ingredients, that decreases phosphorous  
17 availability in animal diets. By adding phytase  
18 to feed, it can increase availability of  
19 phosphorus, and consequently reduce the amount of  
20 phosphorous which is excreted in the manure.  
21 Phytase has also been found to increase protein,  
22 amino acid and carbohydrate availability. Further  
23 research is warranted to study its impact on  
24 dietary interactions and formulations and carcass  
25 and meat quality.

1                   In view of some of the points I have  
2     raised for manure management, I would like to make  
3     the following recommendations for provincial  
4     consideration:

5                   1. That the Province develop a  
6     program for the benefit of the hog industry,  
7     similar to the Irrigation Development Program, to  
8     provide support for sustainable hog production to  
9     meet market demands for high quality pork and to  
10    improve management of hog operations to further  
11    reduce the risk of impacts on soil and water  
12    resources.

13                  2. Provide financial support for  
14    portable nutrient measuring equipment for  
15    producers or offset the cost of soils testing.

16                  3. Provide financial assistance for  
17    engineering costs associated with designing  
18    earthen manure structures or storage systems or  
19    other engineered manure containment systems and  
20    waste treatment systems; and...

21                  4. Provide financial support and  
22    incentives for research into the benefits of feed  
23    additives on nutrient output and the potential  
24    impacts on growth rates and pork quality.

25                           Nutrient management. And the Province

1 of Manitoba has responded to public requests for  
2 changes in the nutrient criteria for manure  
3 management and disposal. And it has also been  
4 proposed that the nutrient management be on the  
5 basis of phosphorous limits, rather than nitrogen  
6 limits.

7                   According to a 2006 University of  
8 Manitoba study, the "Economic Assessment for  
9 Manure Phosphorous Regulations for Manitoba's Hog  
10 Industry, Part 2, overall Impact at the Provincial  
11 Scale, " the estimated cost to the hog industry  
12 will be between \$17 million and \$23 million based  
13 on suggested phosphorous rates. These numbers  
14 represent 18 to 28 percent of the NET income for  
15 hog producers, with most of the impacts likely to  
16 be felt in eastern Manitoba. However, recognizing  
17 public pressures, I would like to make the  
18 following recommendations to allow adequate time  
19 for the hog industry to adopt strategies for  
20 making the transition into this new regulatory  
21 framework:

22                   1: The Province should fully  
23 compensate hog producers who will be immediately  
24 affected by these new regulations. Reimburse them  
25 for costs associated with transporting manure

1 greater distances for disposal; installation of  
2 treatment systems which will reduce nitrogen and  
3 phosphorous; feed additives or pit additives to  
4 reduce nitrogen and phosphorous in the manure; and  
5 any training and education costs associated with  
6 these practices.

7           2. The Province should undertake soil  
8 and water quality monitoring in those areas where  
9 these regulations will most likely affect  
10 producers and determine the impact these changes  
11 may have during the transitory phase.

12           3. The Province should make education  
13 and training available for professionals, manure  
14 applicators and producers so that they can fully  
15 understand the implications of these changes on  
16 their operations.

17           4. The Province should undertake and  
18 financially support research initiatives which can  
19 provide cost-effective manure treatment or  
20 nutrient reduction alternatives; and...

21           5. Given the potential reduction in  
22 net income that the proposed phosphorous threshold  
23 regulations could produce, the Province should  
24 commission a study to determine the number of  
25 operations which will cease to exist and how this

1 might affect the economic sustainability of the  
2 entire hog industry and related spin-off  
3 industries.

4 Odour is a common complaint that you  
5 will hear about the animal industry. According to  
6 a study done jointly by the Universities of  
7 Manitoba and Alberta, under the Manitoba Manure  
8 Management Initiative, over 168 compounds have  
9 been identified in odours from various livestock  
10 sectors. A few of the main compounds that pose  
11 odour concerns include ammonia, hydrogen sulfide,  
12 and volatile fatty acid.

13 One area of research into odour  
14 reduction includes the use of pit additives to  
15 decrease odour from manures. Generally, these  
16 compounds can be classified as masking, blocking,  
17 or odour absorption. A study conducted by the  
18 USDA, in cooperation with Purdue University,  
19 "Laboratory Testing of Commercial Manure  
20 Additives for Swine Odour Control", evaluated the  
21 effectiveness of 35 manure pit additives in  
22 controlling odours. Some of these additives were  
23 found to reduce hydrogen sulfide levels by as much  
24 as 47 percent and ammonia levels by as much as  
25 15 percent. Generally, these tend to be

1 short-lived effects, are cost prohibitive, and are  
2 not suitable for our northern climate. But the  
3 good news is that there is still ongoing research  
4 in the area.

5 Another area for potential odour  
6 abatement is the use of feed additives. Recent  
7 research shows promising results for some feed  
8 additives in either improving feed digestibility  
9 by swine, and/or changing the odour of fresh feces  
10 and urine. The economics of these additives and  
11 their potential impacts on meat quality are still  
12 not well understood, but work is ongoing.

13 General recommendations and concluding  
14 remarks. Two additional recommendations for  
15 consideration are:

16 1. Manitoba has gone to great lengths  
17 to bring in new acts and regulations in recent  
18 years to improve the environmental performance of  
19 the livestock industry. I recommend that the  
20 Province ensure that these acts and regulations  
21 are applied equally to all livestock sectors, and  
22 that an economic assessment be made along with any  
23 environmental assessments. We must recognize the  
24 value of farming in the production of the food  
25 that we eat. It is imperative that we guard

1 against throwing out the proverbial baby, in this  
2 case farming, with the bath water.

3 2. Cutbacks in the 1980s and 1990s to  
4 Federal and Provincial Government monitoring  
5 programs have left us incapable of adequately  
6 assessing the impacts of livestock operations, or  
7 any human activity, for that matter, on water  
8 quality. The current level of monitoring and the  
9 system for coordinating and reporting results are  
10 insufficient to pinpoint sources of pollution to  
11 target remedial action. This deficiency must be  
12 created -- corrected, sorry.

13 In conclusion, I encourage the panel  
14 to consider the decisions you make in terms of the  
15 economic impacts to hog producers and the rest of  
16 society. In a report entitled "Food deprivation:  
17 Trends and targets" released by the FAO in 2006,  
18 it was reported that the developing countries have  
19 made good progress in decreasing world hunger  
20 since the 1990s. However, the trends are seen to  
21 be reversing in the last five years in at least 14  
22 countries. Many business analysts and  
23 ag-economists feel that this trend is at least  
24 partly linked to the pressures to reduce fossil  
25 fuel use by promoting ethanol production.

1 Diverting wheat and corn to ethanol production has  
2 increased their value as a commodity, but has also  
3 decreased their availability and affordable as  
4 food. This points out the need for society to  
5 look beyond its environmental windows to ensure  
6 that the decisions made regarding the  
7 environmental sustainability of an agricultural  
8 industry are reasonable and do not inadvertently  
9 ignore social responsibility and economic issues.  
10 This can contribute to social crisis in our  
11 community and elsewhere in the world.

12 Thank you.

13 THE CHAIRMAN: Thank you, Mr. McKay.  
14 Wayne?

15 MR. MOTHERAL: I don't think I have  
16 any questions.

17 THE CHAIRMAN: Well, we may have a  
18 question.

19 MR. MOTHERAL: One was on the  
20 electromagnetic spectrometry.

21 MR. MCKAY: That's hard to say. It's  
22 EMS.

23 MR. MOTHERAL: EMS. How long has that  
24 been available to site good spots for earthen  
25 pits?

1 MR. MCKAY: I'm not sure. Can you --

2 DR. BAILEY: Brand new.

3 MR. MOTHERAL: Well, this is the first  
4 time that I have heard of it, anyways. And does  
5 it consider the depths of clay and the types of  
6 soil?

7 DR. BAILEY: I don't understand the  
8 principles, but that's what it's purported to do,  
9 and take away from digging and finding and then  
10 porting.

11 MR. MOTHERAL: I would imagine it  
12 would still be dug, anyway.

13 DR. BAILEY: You have to.

14 MR. MOTHERAL: And, I mean, samples,  
15 several samples, probably, too. It would give you  
16 an area to start with probably.

17 DR. BAILEY: Yes.

18 MR. YEE: Just one question. It's  
19 just like the resonance magnetic spectrometry that  
20 is used in the mining industry.

21 DR. BAILEY: Yes.

22 MR. YEE: And so it is not new  
23 technology, but it is new to this application.  
24 And the one question that I have for you,  
25 Dr. McKay, is you mentioned that -- I will see if

1 I can find it here after I have lost my spot.  
2 Well, you were talking about the effects of --  
3 okay, here we go. The economics of these  
4 additives, meaning the feed additives, and their  
5 potential impacts on meat quality are still not  
6 well understood, but work is going on. Who is  
7 doing this type of work?

8 MR. MCKAY: It would probably be U.S.  
9 universities. I have not seen any results that  
10 indicate if they have had a beneficial or a  
11 negative impact, so it is a concern. We have a  
12 lot of agricultural universities that promote  
13 growth promotants, but they rarely test to see  
14 what the end product is like.

15 MR. YEE: Thank you.

16 THE CHAIRMAN: Sir, just in your very  
17 last couple of sentences, you seem to be  
18 indicating that economic factors should trump  
19 environmental factors.

20 MR. MCKAY: Well, I think that they  
21 should be balanced. I didn't mean to imply that  
22 they trump. But I think we have to do a balancing  
23 act. And when we, you know, weigh the various  
24 pros and cons, we have to take into account the  
25 economics, as well, and not just say: Well,

1 environmentally we have to do this. But we have  
2 to be doing a balancing act all the way down the  
3 line.

4 THE CHAIRMAN: Yes, I agree with that.  
5 It is interesting that in a couple of places you  
6 talked about the environmental effects in this  
7 respect and that we should take this into  
8 consideration. We have had some people suggest  
9 that we should be doing a full economic  
10 sustainability review of hog production in  
11 Manitoba. We have, so far, resisted that. But  
12 you seem to be indicating that considering the  
13 economics of the industry should be part of our  
14 review.

15 MR. MCKAY: Well, I think that it  
16 would be responsible to do an entire economic  
17 assessment of all sectors of the agricultural  
18 industry. Don't just single out one. Let's check  
19 them all out.

20 THE CHAIRMAN: Okay. Thank you.  
21 Wayne?

22 MR. MOTHERAL: Yes. Just on the --  
23 you spoke of the need for a -- to develop a  
24 program for the benefit of the hog industry  
25 similar to the irrigation development program.

1 And without knowing exactly what that is, I didn't  
2 really know what you meant by that.

3 MR. MCKAY: Well, my wife actually  
4 wrote this up. And she is an engineer with PFRA,  
5 so she knows a lot more about this than I do. But  
6 there was a program established, as I understand  
7 it, to facilitate irrigation. And the number of  
8 producers is not very large, but an entire  
9 strategy was developed in Manitoba for a small  
10 group. So the hog industry is a rather large  
11 group, and maybe they warrant a similar type of  
12 program.

13 MR. MOTHERAL: Okay. Thank you.

14 THE CHAIRMAN: Thank you very much,  
15 Mr. McKay. Next up is Martin Sharpe. Sir, would  
16 you introduce yourself for the record?

17 MR. SHARPE: My name is Martin Sharpe.  
18 MARTIN SHARPE, having been sworn, presents as  
19 follows:

20 MR. SHARPE: All right. Good evening,  
21 ladies and gentlemen, members of the panel.  
22 Welcome to western Manitoba. My name is Martin  
23 Sharpe. I am a cattle and hog producer from  
24 Minnedosa.

25 I live southeast of 29-14-17 in the

1 R.M. of Odanah. I am a District 3 delegate for  
2 the Manitoba Pork Council, and I'm a voting  
3 delegate of District 7 of the Manitoba Cattle  
4 Producer's Association, and a voting member of the  
5 Keystone Agriculture Producers.

6 My name, or our farm, I guess, when my  
7 brother and my mother and myself sit down at the  
8 table, according to CASE, we are five farms. We  
9 fill out five different CASE forms.

10 My lineage in agriculture is long. On  
11 my mother's side, I am a fourth generation  
12 Manitoba farmer. On my father's side, I am a  
13 fifth generation Manitoba farmer.

14 My home quarter, the southeast of 29,  
15 was homesteaded by a Swedish settler named Johnson  
16 in the mid-1880s. Mr. Johnson came from Sweden.  
17 He brought with him horses, cattle, hogs and  
18 poultry. Through three generations of Johnsons,  
19 until the mid-1940s, when the Johnsons sold it to  
20 the Terleckis, and until the 1940s and 1950s,  
21 until Bill Terlecki sold it to my father in 1958,  
22 they had livestock. And every year since, the  
23 Sharpes have been there since 1958 until the  
24 present day, we have had livestock. We are one of  
25 the few quarter sections in my district where,

1 since the day of settlement, there has been  
2 livestock on the southeast of 29.

3 I have told by members of Hog Watch,  
4 therefore, that my farm should be totally  
5 unproductive because it has had manure every year  
6 for over 100 years. At which point I tell them  
7 that right now my farm is the most productive that  
8 it has ever been, thanks to the manure that it has  
9 received, and thanks to the advances in animal and  
10 crop production that we have seen since, in  
11 essence, 1970.

12 Prior to 1970, from the date of  
13 settlement until the mid-sixties, 1970, my country  
14 south of Minnedosa was half summer fallow, half  
15 crop. And it was black summer fallow, not  
16 chemical fallow, black. You can see the drifted  
17 soil. The drifted soil in the fence lines. And  
18 you can see, as I will go into it, in the soil  
19 tests.

20 My present thing, I should have said  
21 this, will be from my own farm, a series of soil  
22 tests that I received from my soil -- fertilizer  
23 dealer in town. And then my comments on three  
24 family farm barns that ran into trouble in our  
25 municipalities.

1                   If you go to page 1, because of the  
2 access to information problems, when I went to the  
3 fertilizer dealer to get some soil test results,  
4 he said: Well, I can't give you anybody else's,  
5 but I can give you mine. So I have the Lewis farm  
6 soil tests. They farm six miles southwest of my  
7 farm, near the Rapid City corner of number 10.

8                   And we're dealing with phosphate here  
9 today. These are soil tests from Enviro-Test that  
10 Redfern uses. They are strictly a Canadian  
11 company. Ms. Pryzner, during her presentation,  
12 dealt with a lot of American soil test companies.  
13 And they do very little work in Canada.

14                   I will just go with page 1. We are  
15 interested in phosphate. This is after -- this  
16 page 1 is an 80 acre field of canola stubble.  
17 Canola, we have 25 bushels per acre last year.  
18 The soil test was taken on the 10th of October.  
19 It showed residual P of 15. If you follow along  
20 that line, that leaves a P in that field somewhere  
21 between deficit and marginal. And the soil test  
22 recommendations for oats range anywhere from 15 to  
23 35 pounds of P<sub>2</sub>O<sub>5</sub> that they suggest to add.

24                   I'll do number 2. Number 2 was a  
25 90-acre field, too, of canola. And we had 25 last

1 year. The residual P in that field is 11 pounds.

2 If you go to page 3, 9 pounds of  
3 residual P.

4 Page 4, 14 pounds of residual P.

5 Page 5, 12 pounds of residual P.

6 Page 6, 11 pounds of residual P.

7 And I will draw your attention to page  
8 7, the last page. If you'll notice, higher up on  
9 the second line, organic matter content of this  
10 field, this is a 150 acre field of hard red spring  
11 wheat with 25-bushels an acre last year. They  
12 gave you an 11.4 organic matter. This is a newer  
13 breaking field. This has been broken for  
14 approximately 10 years. You can see that on the  
15 manure breaking at 24 pounds of P, residual --  
16 this is page 7. Residual P is 24 pounds. Even  
17 though at 24 pounds that barely touches the  
18 marginal line.

19 And for flax the next year, they are  
20 calling anywhere from 10 to 30 pounds of P2O5. As  
21 Mr. Scott Dick, from Elite Swine, said: In this  
22 part of the province our phosphate problem is that  
23 we don't have enough of it. We have been -- like  
24 I said, for the 75 years that this country was  
25 farmed, half summer fallow, half crop, no

1 fertilizer. It was an organic growing situation  
2 that did not work.

3           And now we, as the next generation on  
4 the land, have got to start dealing with  
5 shortages. And we can either use it -- we can  
6 either add it chemically or we can use manure to  
7 do it, okay? So when we are feeding pigs now, we  
8 don't -- we are too small. We don't use phytase  
9 because we want the phosphate at the end. We want  
10 to be able to fertilize our crops with manure and  
11 get the results of the P.

12           The next phase. After your first  
13 conditional use hearing in Winnipeg, I read in the  
14 Winnipeg Free Press that the way the writer  
15 phrased it was that the individual  
16 environmentalists testified against a powerful  
17 pork lobby. And I -- having experienced just what  
18 happens out in western Manitoba, I kind of got a  
19 chuckle out of that. I will use the example of  
20 three family farms, three family farms in three  
21 different municipalities and their states and what  
22 happened to them. For one, I have the family's  
23 permission to use their name. Well, two of them I  
24 have that for.

25           The third one, in the R.M. of

1 Rosedale, I don't have their name, so I will  
2 simply refer to it as the Rosedale barn. The  
3 Rosedale barn was proposed by a farmer, and his  
4 two sons, in the R.M. of Rosedale -- this is on  
5 page 8 -- in the R.M. of Rosedale in 2003. The  
6 family wanted to put up a 2,300 animal unit  
7 finishing barn, 2,100 head of hog.

8 I have been told that the conditional  
9 use hearing on the barn was held Neepawa. I would  
10 say the presentations for were about half and  
11 half, half for the barn, half against. And the  
12 council in the R.M. of Rosedale, that council took  
13 it under advisement and closed the conditional use  
14 hearing. And nobody heard anything about it for  
15 several weeks.

16 I gave the gentleman a call to see --  
17 the proponent a call to see just where the  
18 application was at. And he said: Well, we  
19 received our approval. We are approved to build  
20 the barn, but we will not be building it. And so  
21 when I asked the farmer: Why?, he said: There  
22 are 49 conditions that they put on the  
23 construction of the barn. At least half of them,  
24 if they follow them through to their logical  
25 conclusion, will bankrupt me.

1                   Now, I will read you -- I have got  
2 three of the particular conditions here on the  
3 page -- on page 8. I will read through them so  
4 that the rest of the people hear them.

5                   "Manure application areas.

6                   All manure generated by the livestock  
7 production operation shall be injected  
8 on cultivated fields or forage crops,  
9 excluding summer fallow."

10 Now, remember that we saw the picture today of  
11 a -- of a rotary disk injector for '40. Those  
12 didn't exist in 2003. And they wanted it:

13                   "...injected in forage crops,  
14 excluding summer fallow, as indicated  
15 in the Manure Management Plan provided  
16 annually to council."

17 These gentlemen had most of their land sold to  
18 forage. And so what they were being told is:  
19 You have got to inject your liquid manure into  
20 your forage using something that doesn't exist,  
21 okay?

22                   "6. Manure applications shall be  
23 undertaken in such a fashion that the  
24 manure does not provide more than  
25 50 percent of the estimated nutrient

1 requirement for a particular crop in a  
2 particular growing season. That is to  
3 say, the applications of nutrient onto  
4 spreading areas shall be undertaken at  
5 a staged rate, to minimize impacts of  
6 leaching."

7 That, in essence, says, that even though you have  
8 to inject with an unknown machine, you can only  
9 inject half of your requirement. You must pay in  
10 full for that, but only for half, and put the  
11 other half on with regular fertilizer, using  
12 application equipment. And that condition 6 says  
13 that you have to pay double application to provide  
14 one shot of fertilizer.

15 And the final one, and this is the one  
16 that the farmer said was really prohibitive:

17 "If unacceptable levels of any of  
18 these substances are detected in any  
19 particular water sample, or if  
20 repeated sampling from a particular  
21 well discloses a persistent problem,  
22 or if local soil monitoring reveals  
23 excessive accumulations of any of  
24 these substances within two feet of  
25 the water table, Council may direct

1           that the frequency of groundwater  
2           sampling be increased, that a more  
3           comprehensive system of groundwater  
4           monitoring wells be installed to  
5           further assess the problem, or may  
6           seek expert opinion to further assess  
7           the problem or determine a remedy to  
8           be implemented by the applicant, at  
9           the expense of the applicant."

10          And that particular one is simply "substances".  
11          There is no list of what those particular  
12          substances are. We can assume that it might be  
13          phosphate or nitrate or E. coli or coliform. But,  
14          like he said, that particular one is a recipe for  
15          bankruptcy.

16                    They still -- the gentleman has two  
17          sons or had two sons -- well, he has two sons.  
18          Whether they are still in Manitoba, I don't know.  
19          The farmer is. He still farms in the R.M. of  
20          Rosedale. But whether his sons have stayed with  
21          him, or whether the Alberta building boom has got  
22          them, I don't know.

23                    My second family farm, and I have  
24          their permission to use the farm, is in  
25          Saskatchewan, directly north of Brandon here up

1 number 9. Rosedale, for your information, is a  
2 fairly large municipality north of Neepawa,  
3 Manitoba.

4           The R.M. of Saskatchewan is directly  
5 up number 10 here, north of Brandon, the Garbutts.  
6 In early 2001, their family farm proposed again to  
7 put up a 300 animal unit barn in the R.M. of  
8 Saskatchewan. According to where they wanted to  
9 site it, and the technical review was good under  
10 the zoning by-law as it existed at that time, it  
11 would have been a go.

12           The Council in the R.M. of  
13 Saskatchewan, at that time, had begun work on a  
14 new zoning by-law, so they gently told the  
15 Garbutts: Don't push this. Let us get our new  
16 zoning by-law made. And I'm sure -- and this is a  
17 quote from Mr. Gurbutts, he has told me: We are  
18 sure you will be pleased with it.

19           And as I have come to know, when you  
20 have a municipal council saying: Well, let us do  
21 something and you will be pleased with it,  
22 pleasure is not what you end up with. When the  
23 new zoning by-law came in, it was -- it was given  
24 first reading and went to a public hearing. It  
25 was one of the most restrictive, at that point, in

1 the province. And so I was asked by other area  
2 delegates, and by the office in Winnipeg, to write  
3 a letter and to appear at the public hearing to  
4 object to the zoning by-law. On page 9 and 10 is  
5 the written letter of objections by myself to the  
6 R.M. of Saskatchewan. And on page 11 -- how am I  
7 doing for time? Should I read this for the  
8 audience?

9 THE CHAIRMAN: Well, you have a little  
10 bit over ten minutes.

11 MR. SHARPE: Okay. So if I could just  
12 read it.

13 THE CHAIRMAN: Certainly.

14 MR. SHARPE: This is September 26,  
15 2001, to Mid-West Planning Board.

16 "Dear Board Members,

17 RE: Saskatchewan's Zoning By-law  
18 number 1144.

19 The R.M.'s by-law begins well.

20 Section 4.2(a)(b), page 7, states:

21 (a) Support and strengthen the  
22 agricultural industry in the Rural  
23 Municipality of Saskatchewan and to  
24 provide flexibility and opportunity  
25 for farmers operators to engage in a

1                   variety and range of farming  
2                   practices; and  
3                   (b) Protect the agricultural industry  
4                   and its land resources in recognition  
5                   of the contribution of agriculture to  
6                   the economy, lifestyle and character  
7                   of the Rural Municipality of  
8                   Saskatchewan."

9    After such a promising start, I was disappointed  
10   and saddened, as a farmer, to have my  
11   opportunities and flexibilities prohibited,  
12   prohibited, prohibited. As a -- page 17. As a  
13   farmer, therefore, I must object to anything that  
14   prohibits agriculture's flexibilities and  
15   opportunities.

16                   And if you'll turn to page 11 from  
17   your secretary -- page 12, I'm sorry, this is the  
18   R.M. of Saskatchewan's Zoning By-law for the size  
19   of -- they call them APO's, Animal Production  
20   Operations. And you will notice that on the first  
21   line:

22                   "For APOs producing liquid manure  
23                   using earthen manure storage  
24                   facilities:  
25                   251 animal units and up - prohibited."

1 Now, the Gurbitts got ahold of this. And their  
2 barn was going to be 300 animal units. They were,  
3 in fact, prohibited from that.

4 "For APOs producing liquid manure  
5 using tank storage facilities:  
6 801 animal units and up - prohibited."

7 And then:

8 "For APOs producing non-liquid manure:  
9 2501 and up - prohibited."

10 And an example of that would be feedlots. Now,  
11 even back then, and this was 2001, and this is  
12 back to page 9:

13 "I, Martin Sharpe, representing  
14 District 3 of the Manitoba Pork  
15 Council hereby object to the  
16 following:

17 1. The PROHIBITING of family farms  
18 with over 250 animal units using  
19 earthen manure storage of liquid  
20 manure. According to the latest  
21 provincial statistics, the economic  
22 size of a family-owned, stand alone,  
23 farrow to finish operation using  
24 liquid manure in an earthen storage is  
25 300-325 sows."

1 And that was in 2001, so that was six years ago  
2 now. It is far higher now.

3 "300-325 sows in a farrow to finish  
4 operation equals 375-406 animal units,  
5 which would be PROHIBITED in the R.M.  
6 of Saskatchewan. Flexibility and  
7 opportunity?"

8 And at that point, and I won't -- and then I say:

9 "The EXTREME minimum separation  
10 distances are, in fact, primarily  
11 double, and in some cases triple those  
12 of other municipalities in the  
13 Mid-West Planning District.

14 Compared to the provincial separation distances,  
15 they are up to three times those in the R.M. of  
16 Saskatchewan.

17 And when I asked them:

18 "When I questioned the R.M. of  
19 Saskatchewan Councillors at their  
20 PUBLIC HEARING, I was told that they  
21 had not done the GIS -- the GPS before  
22 they passed the by-law. A quick look  
23 at the municipal map shows there are  
24 not areas available for a large  
25 A.P.O. "

1 There is no place for an Intensive Livestock  
2 Operation in the R.M. of Saskatchewan.

3 And, sadly, the Gurbitts were,  
4 therefore, turned down on their barn.

5 And since 2001, there has not been an  
6 application to the R.M. of Saskatchewan for any  
7 livestock operation. No hog barns, no dairies, no  
8 feedlots, nothing. Now, the cattle operations are  
9 all grown, but they are not bothering with them.  
10 They have a few of them, but they are not  
11 bothering with them. What they are scared of, and  
12 what they don't want, and what this extremely  
13 restrictive by-law has given them is no barns for  
14 livestock growth at all.

15 The third one, and it was objected to,  
16 Manitoba Agriculture objected to it, the Pork  
17 Council objected to it. But on December 17, 2001,  
18 I received the following letter, this is page 15,  
19 from the Mid-West Planning District:

20 "In accordance with Section 45(5) of  
21 the Planning Act, I am writing to  
22 inform you that the Rural Municipality  
23 of Saskatchewan has, on December 11,  
24 2001, given third reading to its  
25 Zoning By-law. The Zoning By-law is

1 now in full force and effect and is  
2 numbered By-law Number 1144.

3 If you have any questions, please  
4 called the undersigned.

5 Yours truly, Wayne Poppel,  
6 Development Officer."

7 As I said, there has been no development in the  
8 R.M. of Saskatchewan. Mr. Poppel still works  
9 there, and he has not been a very busy man.

10 The final one is the Can Am barn in  
11 the R.M. of Daly. Ms. Pryzner, who was a Daly  
12 Councillor, spoke on it a little earlier today, so  
13 I will just go kind of quickly through it. But  
14 first I will get you to look at page 10. In 2004,  
15 the government changed the Manitoba Livestock  
16 Manure and Mortalities Management Regulation  
17 Number 42/98. It has become 52/04 now.

18 One of the first changes that they  
19 made was the first one in the definitions here for  
20 "manure":

21 "Manure" - newly defined as includes  
22 animal feces or urine, contaminated  
23 water (runoff) and wasted feed,  
24 livestock bedding, soil, hair,  
25 feathers and other debris"

1 that might flow out of your yard. With the  
2 changes to the regulations, if Conservation comes  
3 to your yard and sees that stuff flowing out, they  
4 will give you a warning. And they will also say  
5 that you have to collect that from leaving your  
6 property. If it is an earthen manure storage,  
7 for a short-term it was called a "collection  
8 basin". It's in-ground and the water flows into  
9 it and is caught.

10 When Can Am came to the R.M. of Daly,  
11 there was an instant -- well, it took them a while  
12 to get it going. A group was formed called the  
13 Concerned Daly Ratepayers. It was headed by  
14 Ms. Pryzner and Mr. Dolecki. And they wanted to  
15 stop the hog barns from coming into Daly at all  
16 costs.

17 They went to the R.M. of Daly Council  
18 and persuaded them that their zoning by-law that  
19 they had in effect was not strong enough. So the  
20 Council, under extreme pressure, said: Well, you  
21 people come up with one, and so I have included  
22 it. It starts on page 18 and is the "Rural  
23 Municipality of Daly By-law Number 2002-02". And  
24 this is what the Concerned Daly Ratepayers came up  
25 with for a new Zoning By-law in the R.M. of Daly

1 to stop the hog barn.

2 I will draw your attention to certain  
3 portions starting on page 22 of your secretary's  
4 marking with a circle. This is Zoning By-law  
5 Number 2002-02 (f):

6 "Applications for a conditional use  
7 pertaining to a new livestock  
8 production operation or the expansion  
9 of an existing livestock production  
10 operation shall be denied if the  
11 proposal contravenes any of the  
12 following, and these requirements  
13 shall not be subject to any  
14 application for variance or  
15 modification:"

16 Now, even intergovernmental affairs, when they  
17 heard that, said: Well, that's what variances and  
18 modifications to zoning by-laws are for, is for  
19 the council to have some discretion. But this  
20 zoning by-law said: Nothing, nothing at all. And  
21 I objected to this at their public hearing. I  
22 objected to page 23, number 7. And I objected, as  
23 a cattle producer, knowing that "manure" had been  
24 changed.

25 "Where liquid manure storage by means

1 of any below ground storage, including  
2 earthen manure lagoons, is proposed,  
3 it is to be denied."

4 So the government, on one hand, had changed the  
5 rules and said that as a cattle producer you have  
6 to collect your runoff. This zoning by-law says:  
7 You can't collect it underground. In other words,  
8 any cattle producer in the R.M. of Daly who was  
9 told -- who was warned or given an order to put in  
10 a collection basin, under this zoning by-law,  
11 couldn't do it. It went on and on. It is a very  
12 restrictive, extremely bad zoning by-law. The  
13 council, in their wisdom, turned it down, and went  
14 back to the original zoning by-law.

15 The barn is now in Daly and working  
16 well. I have not heard -- except for Ruthy's one  
17 complaint that she had here today, I haven't heard  
18 about any problems of it.

19 And to conclude, I guess, I'm a farmer  
20 of both livestock and the earth. As part of -- as  
21 Mel's presentation said, we want to leave the air  
22 clean, the water fresh. And the continuation of  
23 that creed is that we want to leave the land  
24 better than we got it. And in my -- and that, in  
25 my mind, means less weed seeds in the soil and

1 more fertile. And if we can use manure to make  
2 our land more fertile, we have done a good job.

3 The second thing is Bill 40. It  
4 hasn't been mentioned here yet today, but it was a  
5 bill to make it easier to get livestock operations  
6 going in the province. Three ministers of  
7 Intergovernmental Affairs, Mr. Friesen,  
8 Mr. Hychuck and Mrs. Wochuck pushed it forward,  
9 and then it was all of a sudden just killed. And  
10 we have now been left with the planning districts  
11 putting together livestock areas in a development  
12 plan. And those meetings are beginning to get  
13 ugly again.

14 And so I'm suggesting that you think  
15 over that Bill 40, with its requirements of the  
16 municipalities to do a little work, and the  
17 province to do the rest, that may be the way to  
18 go. Because in this area of the province,  
19 especially, from Brandon north, it is becoming a  
20 have -- or it is becoming more of a have-not part  
21 of the province. We could be a flourishing  
22 industry, but we are not.

23 THE CHAIRMAN: So, Mr. Sharpe, you're  
24 suggesting that a lot of the authority to approve  
25 livestock operations should be taken away from the

1 municipalities and done by the province?

2 MR. SHARPE: I'm saying that in this  
3 area of the province, municipal councillors and  
4 councils that are, in essence, going rogue that  
5 have been -- that have taken suggestions from the  
6 province to do something a certain way, and have  
7 gone from point A to point B in one second.

8 And they have gone from some  
9 municipalities, the Hamiotas, the Glenwoods, that  
10 are allowing the livestock in and that are  
11 prospering, compared to the livestock of  
12 Saskatchewan and Elmwood and Archie. Archie in  
13 the last sentence -- or the last census or the  
14 census, was now a third of the population. And I  
15 blame that simply, or totally, on the Archie  
16 Council. They had a chance for some development  
17 and they said: "No".

18 THE CHAIRMAN: But shouldn't the  
19 people have that right to make that decision?  
20 And, I mean, they are elected by the general  
21 population.

22 MR. SHARPE: As a democrat, I would  
23 like to tell you, yeah, that's the way it should  
24 be. But with today's media, and the internet,  
25 there are so many -- there are just so many

1 misleading stories going around that it becomes so  
2 easy to frighten people so that they make bad  
3 decisions.

4 THE CHAIRMAN: Well, I don't want to  
5 get into -- we could get into a lengthy discussion  
6 on democracy and how it is impacting us on all  
7 levels, but tonight is not the night for that.  
8 Edwin?

9 MR. YEE: Mr. Sharpe, how do you feel  
10 about the changes to the Planning Act requiring  
11 municipalities to establish development plans? Do  
12 you see that as being something positive, in terms  
13 of looking at the agricultural industry and  
14 setting aside areas for development?

15 MR. SHARPE: In this part of the  
16 province, pretty well every area of every  
17 municipality is agricultural. But the first one  
18 that did it in this area was the Neepawa and Area  
19 Planning District. And they brought forward, even  
20 in their development plans, extremely  
21 restrictive -- for a wide open agricultural area,  
22 extremely restrictive agricultural animal rules.  
23 And so it is all bound up in appeals.  
24 And they are supposedly going to the Municipal  
25 Board to get themselves straightened out. Now,

1 they are the ones that have first tried that. And  
2 so I was hoping, you know, that that would be a  
3 way to kind of get it going. But if the Neepawa  
4 area is any indication, we are going to be  
5 squandering for another three or four years. It's  
6 not -- it's not going to be the answer to the  
7 problems.

8 THE CHAIRMAN: Wayne?

9 MR. MOTHERAL: Well, I don't think I  
10 can do any justice to this without debate, and  
11 it's not allowed. I would only recommend, or  
12 attack what you are recommending here, which is  
13 probably more regional cooperation. Many areas in  
14 the province do have larger planning districts.  
15 And they have rough times at the start to try and  
16 come up with development plans. But in the long  
17 run, sometimes they are for the best. Don't give  
18 up fighting.

19 MR. SHARPE: Oh, no, no. And in your  
20 area of the province, there is a lot of -- it  
21 seems to be that the councils act a lot more  
22 mature.

23 MR. MOTHERAL: I am not going to get  
24 into that.

25 THE CHAIRMAN: Thank you very much.

1 Thank you very much for that, Mr. Sharpe.

2 MR. SHARPE: All right. Thank you.

3 Again, welcome to West Bank.

4 THE CHAIRMAN: Please state your name  
5 for the record.

6 MR. ROLFE: David Rolfe, President of  
7 Keystone Agricultural Producers.

8 DAVID ROLFE, having been sworn, presented as  
9 follows:

10 THE CHAIRMAN: Go ahead, sir.

11 MR. ROLFE: I am David Rolfe,  
12 president of Keystone Agricultural Producers, and  
13 on behalf of Manitoba's farm families, I am  
14 pleased to have the opportunity to present to the  
15 Clean Environment Commission on an issue that will  
16 have an impact on how we farm in this province in  
17 the future.

18 As I mentioned, I am the president of  
19 Keystone Agricultural Producers, which is the  
20 largest general farm policy organization in  
21 Manitoba. Our membership includes thousands of  
22 individual farmers and we have representation  
23 around our board table from at least 20 provincial  
24 commodity groups. Our role is to represent and  
25 promote the interests of farm families, and it is

1 with this perspective in mind that I'm here today.

2 As the CEC continues its review of the  
3 hog industry's environmental sustainability  
4 process, it is critical that we understand the  
5 impacts that this process can have on all farms in  
6 the province and move forward. Agricultural  
7 sustainability is like a three-legged stool,  
8 representing economic, social and environmental  
9 considerations. One cannot exist without the  
10 others. So from our perspective it is critical  
11 that the Clean Environment Commission has an  
12 understanding of what impacts its recommendations  
13 may have.

14 As farmers we are also concerned about  
15 the future of our industry and recommend that the  
16 Clean Environment Commission give due  
17 consideration to the impact that its decisions may  
18 have on the ability of young farmers to build  
19 their operations and diverse and expand into the  
20 hog sector.

21 Linkages within agricultural in our  
22 communities: The Clean Environment Commission  
23 must recognize that agriculture is a very  
24 interconnected industry. While your decisions on  
25 the environmental sustainability of the hog

1 industry may appear to isolate and affect the  
2 1,400 hog farmers in the province, the reality is  
3 that all of Manitoba's farmers will be impacted in  
4 some way, from the grain farmer who grows the feed  
5 for the hogs, to the company worker that mixes it  
6 and the truck driver that delivers it. This issue  
7 will have a wide reach into Manitoba's rural  
8 communities, urban centres, and many homes  
9 throughout Manitoba.

10 As a result of the current uncertainty  
11 in the hog sector, losses are being felt in the  
12 construction, equipment and the feed industries  
13 across the province. The economic reality is that  
14 hog production is good for Manitoba, and to ensure  
15 that these benefits stay in our province we must  
16 be willing to provide them with the tools that  
17 they need to continue to improve environmental  
18 sustainability, instead of simply dictating that  
19 they continue to do more.

20 We must also be mindful of other  
21 industries that are looking to agriculture as a  
22 valued partner. In Manitoba we continue to focus  
23 on opportunities in alternate energy and bio  
24 fuels. To achieve the environmental rewards of  
25 this industry, the economic reality is that a

1 strong livestock sector will be needed to use  
2 their co-products.

3 I farm near Elgin, Manitoba, which is  
4 southwest of Brandon, about 45 minutes southwest  
5 of here. I have seen the economic advantage of a  
6 sustainable and growing hog sector first hand.  
7 Jobs have been created in our communities and our  
8 area is home to a new feed mill. An ethanol plant  
9 is also in development in the southwest. Part of  
10 their business plan includes the sale of high  
11 protein feed which is created as a byproduct.

12 As a pause in the hog industry  
13 continues and uncertainty remains in the industry,  
14 there is almost no growth. This decreases the  
15 opportunity for this bio fuel facility and may  
16 develop into a situation where these valuable  
17 byproducts have to be exported out of Manitoba.

18 Another proposal planned to link  
19 biotech hog production with alternate energy, and  
20 these plans are halted as well. Instead of  
21 developing our own value-added and alternative  
22 energy industries, all we will be doing is  
23 providing the raw materials for these  
24 opportunities to grow in other jurisdictions.

25 The temporary pause has caused nothing

1 but harm to the economic growth in the province.  
2 It is also causing a domino effect from the  
3 effects that I just highlighted previously. It is  
4 not just the sustainability of the hog industry  
5 that is under review, but the sustainability of  
6 the rural economy.

7           Some of the current initiatives in  
8 agriculture: In agriculture we are fortunate to  
9 have farmers that move ahead with voluntary  
10 initiatives that protect and improve our  
11 environment, and hog producers are among the  
12 leaders. Farmers continue to lead the way in  
13 adopting new technologies and management  
14 techniques, aided by the information provided as  
15 part of some important voluntary programs. These  
16 include the environment farm planning process,  
17 which helps farmers identify environmental risks  
18 on the farm, develop a mitigation plan, and  
19 implement it with some government cost sharing.  
20 The Riparian Health Council and the Riparian Tax  
21 Credit have also had success in changing farmer's  
22 management practices near these important  
23 environmental areas.

24           Most recently we have seen exceptional  
25 response from farmers in the Rural Municipality of

1 Blanshard, who are participating in an alternative  
2 land use services pilot project. Over 70 per of  
3 land owners in this area have evaluated the  
4 environmental benefits on their land and have  
5 voluntarily enrolled in an ALUS program for a  
6 relatively small acre incentive.

7           The point of these examples is to show  
8 that farmers want to do the right thing and will  
9 continue to do more if there is an incentive  
10 structure that provides the flexibility we need to  
11 run our businesses. Most often new environmental  
12 initiatives come at the cost of the farmer, and to  
13 a point we have been willing to absorb these  
14 costs. The problem now is that farmers have done  
15 everything that they can and can absorb no more,  
16 simply because we have no way to pass along these  
17 costs to our customers. We strongly believe that  
18 if environmental benefits are enjoyed by all, then  
19 we should all share in the costs of providing  
20 them.

21           The Manitoba Pork Council lists all of  
22 the acts and regulations that govern their  
23 industry on their website, and certainly it is  
24 quite extensive. Over the last ten years the hog  
25 sector has been under increasing scrutiny as it

1 relates to environmental practices and this has  
2 lead to a much broader understanding in the  
3 farming community about our collective  
4 responsibility towards the environment. As a  
5 result, hog farmers have been one of the most  
6 progressive sectors in conducting research,  
7 developing new technologies, and implementing  
8 beneficial management practices. Unfortunately,  
9 government regulations have not always kept up to  
10 the pace and this must also be considered.

11           For example, a low phytase barley  
12 variety has been developed and could provide  
13 another opportunity for farmers to lower the  
14 amount of phosphorous that has to be managed on  
15 their farm. The slow and complex nature of our  
16 variety of registration system means that the  
17 Federal Government has seriously delayed its  
18 introduction. There is also a Federal regulation  
19 in place that sets out guidelines for the minimum  
20 phosphorous requirements for feed rations, and  
21 this was developed decades ago. It is very  
22 possible this is set too high and could be revised  
23 to further decrease the amount of phosphorous  
24 managed on hog farms.

25           On the provincial side, government has

1 delayed granting permits to producers who wish to  
2 modernize or expand their manure storage  
3 facilities, or in some cases have set standards so  
4 high that they are impractical to implement. As a  
5 result they are actually restricting the  
6 environmental improvements that livestock industry  
7 wishes to make.

8           The point of these examples is to  
9 illustrate that it is not only the farmer who has  
10 a role to play. All levels of government have to  
11 put a priority on developing a practical and  
12 reasonable approach that works with agriculture.

13           We live in a world of unintended  
14 consequences, and I would urge the panel to bear  
15 that in mind when they are making their  
16 recommendations in light of some of the situations  
17 that I have just highlighted.

18           As a proactive measure, since the mid  
19 1990s, hog producers have had a peer review system  
20 in place to deal with environmental issues.  
21 Producers are also required to complete manure  
22 management plans which are designed to ensure that  
23 the nutrients are applied in an environmentally  
24 sustainable manner. Just as importantly, these  
25 are being enforced across the province.

1                   There are other structures currently  
2   in place that address environmental  
3   sustainability. If there are complaints about a  
4   hog farm, or any other farm for that matter, these  
5   can be taken to the Farm Practices Protection  
6   Board and thorough investigations are undertaken.  
7   If a farmer is found to be at fault, remedial  
8   action is required and this too is enforced.  
9   Regulations about location and environmental  
10  sustainability of hog barns are also part of the  
11  municipal planning process, as local councils must  
12  identify areas where hog barns and other livestock  
13  ventures can and cannot be located.

14                  All of these processes are designed to  
15  ensure the overall sustainability of the hog  
16  industry. However, regulation alone simply can  
17  not provide the widespread environmental impacts  
18  that Manitobans are looking for, which is why  
19  Keystone Agricultural Producers continues to  
20  support voluntary incentive based initiatives. We  
21  recognize that there is certainly need for  
22  regulation and enforcement, but as I mentioned,  
23  many of the issues identified by the Clean  
24  Environment Commission for consideration under  
25  this review, like land use planning, water

1 quality, odour, and disease transmission are  
2 already addressed by existing regulation. Others,  
3 like nutrient management, will soon be enforced by  
4 regulation.

5 In short, a balanced mix of incentives  
6 and regulations are needed to ensure the ongoing  
7 environmental sustainability of the hog sector,  
8 and as for agriculture as a whole. We encourage  
9 the Clean Environment Commission to focus its  
10 recommendations on this area.

11 In closing remarks, on behalf of  
12 Keystone Agricultural Producers and the farm  
13 families that we represent, I wish to thank you  
14 for the opportunity to present during this review  
15 of the hog sectors' environmental sustainability.  
16 We take our role as land managers seriously, and in  
17 addition to the voluntary initiatives that we  
18 undertake, there are also a wide range of programs  
19 and regulations that compel hog farmers and all  
20 farmers to protect and improve our environment.  
21 Farmers and their families strive to ensure that  
22 future generations will grow in a sustainable  
23 Manitoba. Thank you.

24 THE CHAIRMAN: Thank you, Mr. Rolfe.  
25 On the top of page 2, and then I think you, sort

1 of in your almost closing comment, the last  
2 sentence in the paragraph at the top of page 2,  
3 you talk, we must be willing to provide them with  
4 the tools they need to continue to improve  
5 environmental sustainability. And then at the end  
6 you talk about a balanced mix of incentives and  
7 regulations. Those two are related?

8 MR. ROLFE: Very much so.

9 THE CHAIRMAN: And just what do you  
10 have in mind? Could you expand a little on that?

11 MR. ROLFE: We see regulations being  
12 proposed that, again, are going to impose  
13 additional restrictions on our industry, whether  
14 it is the livestock or whether it is the  
15 agricultural industry as a whole. We would  
16 certainly like to see some cost sharing of those,  
17 of the costs involved in complying with those  
18 regulations, and we had made recommendations to  
19 government on what the incentive package should  
20 look like. It has been estimated in some  
21 quarters, for the hog industry, it would cost  
22 approximately \$100 million to comply with the  
23 requirements that are currently being reviewed and  
24 currently being proposed as regulation. So we see  
25 that there is an opportunity here for the public,

1 through their government, to cost share in those  
2 improvements.

3 THE CHAIRMAN: You talked about, you  
4 commented on the Federal Government and the  
5 problem with the CFIA feed ration restrictions and  
6 the grain or the barley problem, but you also said  
7 on the Provincial side, government has delayed  
8 granting permits to producers or it has set  
9 standards so high. Can you expand a little on  
10 that, please?

11 MR. ROLFE: In probably over the last  
12 two and a half years, there has been examples of  
13 producers out there who have wanted to expand  
14 their manure storage facilities, or build barns,  
15 or modernize their facilities, and delays and  
16 delays and delays in obtaining the necessary  
17 permits from different government departments to  
18 proceed with those changes. That is an unintended  
19 consequence, that is an industry that has been  
20 restricted from, in some cases, existing livestock  
21 operations from modernizing their operations, from  
22 making environmental improvements simply because  
23 the permits were not being granted in a timely  
24 fashion.

25 THE CHAIRMAN: Thank you. Edwin?

1                   MR. YEE: Yes, Mr. Rolfe, you  
2 mentioned if there were complaints about the hog  
3 farm, they can be taken to the Farm Practices  
4 Board and thorough investigations undertaken. Can  
5 you elaborate a bit more? Who undertakes the  
6 investigations, and do you have any statistics,  
7 say from last year, about the number of complaints  
8 and how they were resolved?

9                   MR. ROLFE: I don't have statistics on  
10 the number of complaints, but we have in the  
11 Province of Manitoba a Farm Practices Protection  
12 Act, and under that Act there is a Farm Practices  
13 Protection Board that was set up. That  
14 legislation was put in place, oh, probably a good  
15 number of years ago, it has been in place for a  
16 long time. It acts as a referee in the situations  
17 where a complaint is brought forward from the  
18 public, whether it is an environmental complaint,  
19 whether it is a complaint over dust, odour, hours  
20 of work, or those types of issues. It primarily  
21 was a board that was set up to deal with mainly  
22 agricultural issues related to crop production.  
23 Since then it has had to deal with, in some  
24 instances, livestock production and complaints  
25 directed against livestock operations. I don't

1 have statistics. The board itself I understand  
2 does the work, they seek advice where necessary on  
3 complaints, and will make decisions based on the  
4 advice that they receive from others who are  
5 qualified to investigate the situation.

6 MR. YEE: Thank you.

7 MR. MOTHERAL: Yes, thanks  
8 Mr. Chairman.

9 Mr. Rolfe, first I would like to  
10 congratulate you and your association for all of  
11 the work that you do on behalf of farmers. I know  
12 that you have a lot on your plate and you work on  
13 a wide range of issues, I know that for a fact. I  
14 have to admit that I'm a farmer myself and I  
15 haven't always agreed with everything, but that is  
16 my prerogative.

17 The alternate land use, when you were  
18 mentioning the RM of Blanshard, is that a very  
19 common thing throughout other areas of the  
20 province? Are there any other areas that are  
21 taking advantage of this? I know it is a very  
22 small incentive as far as dollars.

23 MR. ROLFE: The alternate land use  
24 concept has been in development probably for the  
25 last five to six years. We at Keystone have been

1 working away at trying to promote the ALUS  
2 concept. The project I mentioned in the RM of  
3 Blanshard is a pilot project to prove the concept  
4 and how it can work. It is funded by the  
5 Provincial Government, it is funded by the Federal  
6 Government, and it is funded from non-governmental  
7 organizations. The project is the first in  
8 Canada. There are other provinces that are  
9 embracing the concept and there is pilot projects  
10 proposed for most of the other provinces in  
11 Canada, especially the western provinces. It is a  
12 move to begin to change government policy and to  
13 embrace the concept of ecological goods and  
14 services, and preserving natural capital. And it  
15 is a concept that has been developed by farmers,  
16 driven by farmers, and hopefully managed by  
17 farmers themselves through advisory boards and  
18 those types of concepts.

19 MR. MOTHERAL: Thank you. Can you  
20 visualize a program like this seeing the struggles  
21 that all farmers, livestock and grain, are having  
22 today? Can you see this as being an increasing  
23 incentive and getting close to where our fellow  
24 farmers in the United States have enjoyed the CRP  
25 program, which is very, you know, its conservation

1 reserve programs, where it is very financially  
2 inducing, can you see it ever going further than  
3 what we have right now?

4 MR. ROLFE: We certainly hope so. We  
5 certainly hope it gets embraced nationally. There  
6 is certainly potential for it to become an  
7 environmentally sustainable program, to make  
8 substantial gains on environmental protection  
9 right across Canada. And I think there is huge  
10 opportunities there. And we get into the politics  
11 of trade deals, we get into the politics of  
12 environmental conservation, but I think there is  
13 huge opportunities there. We have wetlands that  
14 we need to preserve, we have habitat that we need  
15 to preserve, we have species that we need to  
16 preserve, and we also have cleaner water, cleaner  
17 air, and all of those other goals in mind when we  
18 begin to talk about ALUS. It is a very broad  
19 concept, it is a concept that can be adapted and  
20 adopted by all of agriculture, and it is a concept  
21 that deals with preservation rather than  
22 remediation.

23 MR. MOTHERAL: Thank you.

24 THE CHAIRMAN: Thank you very much,  
25 Mr. Rolfe, thank you for coming out. I have one

1 parting question, when do you find time to farm?

2 MR. ROLFE: That is probably the best  
3 question of all.

4 THE CHAIRMAN: Next, Mike Sheridan.  
5 (Short pause)

6 THE CHAIRMAN: We are back. Please  
7 introduce yourself for the record?

8 DR. SHERIDAN: My name is Michael  
9 Sheridan.

10 MICHAEL SHERIDAN, having being sworn, presented as  
11 follows:

12 DR. SHERIDAN: Thank you very much. I  
13 would like to thank everybody for the opportunity  
14 to speak tonight. My apologies for leaving it so  
15 late, and I appreciate the fact that I was given  
16 the opportunity to have a few minutes with you  
17 tonight.

18 My name is Mike Sheridan. I'm a  
19 veterinarian out of Steinbach, Manitoba. I came  
20 to Manitoba back in '77, and practiced in Selkirk  
21 for three years. It is feeling like calving  
22 season, by the time we get home tonight it will be  
23 a different thing than swine practice being up  
24 this late.

25 I moved to Steinbach in 1980 and

1 worked in general practice focusing mainly on food  
2 animals and swine, and in '88 joined forces with  
3 Dr. Walter Heuser, and since then we have  
4 developed a swine practice with nine  
5 veterinarians, six full-time, three part-time,  
6 five of us are partners.

7 Our client base range is a wide range  
8 of farms. We work with small family farms, large  
9 corporate farms, we have many colony herds,  
10 various combinations of different types of  
11 production systems ranging from boar studs to  
12 farrow to finish unit, to nurseries, to feeder  
13 barns. A large part of our business is exporting  
14 swine to the U.S. And animals that we see every  
15 week, or farms that we see every week.

16 There is a number of things in swine  
17 practice that we need to deal with. And the  
18 reason I wanted to speak here tonight is to focus  
19 on a component of that, and that is part of our  
20 biosecurity protocol, and I will explain that in a  
21 minute. But just recognize that as swine  
22 practitioners, we are dealing with food safety,  
23 animal health, we deal with production situations,  
24 health management situations. So we really do  
25 cover a wide range of production systems in a

1 large range of farm settings. And at all times  
2 one needs to remember that our goal really is  
3 health management. I will be talking about  
4 biosecurity, but really health management is our  
5 main goal.

6                   And biosecurity, when we get to that,  
7 is really the prevention of new diseases coming  
8 into the farm. And the reason I'm here tonight is  
9 I have received some comments from some fellow  
10 practitioners, as well as from some clients, that  
11 through some of the discussions, that perhaps some  
12 of our biosecurity protocols that are in place  
13 have been maybe misinterpreted as being means of  
14 keeping people out of barns and keeping prying  
15 eyes away from our industry.

16                   I really just wanted the opportunity  
17 to let you know that they are very real, and what  
18 we do build into disease prevention programs are  
19 based on, not always science, but the majority of  
20 it, as you will see, is based on science. Some of  
21 it is based on the unknown, and building in  
22 barriers and sort of buffers, if you will, in our  
23 procedures to ensure that diseases won't get into  
24 the barn, diseases that will affect production of  
25 the farm, or animal welfare, things like that.

1 And none of us want to see the ravages of disease  
2 in a pig barn from a number of different  
3 perspectives.

4 And always remember, as we are going  
5 through here today, that food safety is really our  
6 ultimate goal. We don't want sick animals, we  
7 don't want diseased animals, and we don't want  
8 animals that are receiving various adulterations  
9 that will affect them as food products in our food  
10 chain.

11 So really when we looking at, as I  
12 said, we are looking at farms, we have two  
13 components. One is the biosecurity component,  
14 keeping disease out, and the other one is the  
15 control of the bugs that we already do have. We  
16 won't spend any time on that aspect, that gets  
17 into health management, I really just want to talk  
18 to you about how we prevent diseases from getting  
19 into farms.

20 And as you can well imagine, our  
21 industry has, we have a very high health industry,  
22 swine industry in Manitoba. And I would say when  
23 you look across the west, Manitoba, Saskatchewan,  
24 Alberta, we have very high levels of health, and  
25 that is based on a lot of the health prevention

1 protocols that have been in place. And I really  
2 think that we are the envy of many of the other  
3 swine production areas.

4 Over the last 10 to 15 years, we have  
5 seen a real change in the demographics of the  
6 herds, both in the production style and the size,  
7 et cetera. But one of the things that we have  
8 seen in that period of time has been an upgrading  
9 of the health status through depopulation and  
10 repopulation of animals, or in the construction of  
11 new barns, some of which we have heard referenced  
12 here tonight, which were populated with high  
13 health animals, which gives us a very good start  
14 to preserving the health and the welfare of the  
15 animals inside.

16 The other nice thing, and it didn't  
17 dawn on me until I was talking to one of my  
18 colleagues, that we have a small sourcing of  
19 animals, there is only a set number of seed stock  
20 producers that are active here in the west. And  
21 all of those, if not all, have extremely high  
22 health statuses. So as a result we have  
23 populations of pigs that do not have a lot of  
24 disease entities in them that you will find  
25 elsewhere, such that is their immunity to those

1 diseases is very low, and as a result of that they  
2 are very susceptible and, therefore, we build in  
3 our protocols to prevent the addition of new  
4 diseases.

5           As you can see from the list,  
6 biosecurity goes into a whole host of areas.  
7 Certainly breeding stock, I will touch on briefly;  
8 location is important. Some of the west, we envy  
9 the space that you have in Western Canada for  
10 locating pig farms. Semen, we will touch briefly  
11 on, very, very high end business now with a lot of  
12 monitoring. Transportation, I suspect you will  
13 have heard other presentations on that, and I will  
14 touch on some of what they are doing. The people  
15 aspect, not having visitors on the farm. And then  
16 supplies, when we talk about supplies, we are  
17 looking at how we can prevent diseases coming in.  
18 And then we go right down to rodents, flies and  
19 mosquitoes and, in this day and age, of Avian  
20 influenza, birds as well.

21           Buying and breeding stock certainly is  
22 our biggest challenges and there is just some  
23 indications, there is different strategies that we  
24 employ for bringing in breeding stock. We try to  
25 buy from high health sources, we try to buy from

1 sources that don't have the diseases that are  
2 absent from our farms, and we build in other  
3 buffers around that, but the bottom line is, it is  
4 a disciplined approach to bringing in animals, and  
5 we find that the companies are very good in  
6 providing health data and data records so that we  
7 are always in tune with what is going on as  
8 quickly as they are.

9                   But we still build in buffers, and  
10 more and more farms are building in buffers  
11 against the introduction of diseases that may not  
12 be noted in the farm at the time of dispatch of  
13 those animals, so we have systems called  
14 quarantine barns where animals will be placed away  
15 from the main farm, 30 days, 60 days, 90 days. It  
16 will really depend on the program, and the  
17 importance of health and the maintenance of health  
18 to the system, whether it is a commercial farm in  
19 a high density area, or whether it is a very high  
20 health breeding seed stock farm in a more remote  
21 area. So we do build quarantines in to try to  
22 protect ourselves, waiting for the phone call 60  
23 days out and saying, where are those gilts that we  
24 sent you? We want to know they are located  
25 somewhere in a safe location away from the main

1 farm so that they can then be sent to slaughter or  
2 whatever, if there is any risk that they are  
3 potential risk to other animals.

4 THE CHAIRMAN: Dr. Sheridan, what is a  
5 gilt?

6 DR. SHERIDAN: Gilt is a young female  
7 breeding animal. Sorry, I apologize, I hope there  
8 won't be too much of that here for you, sorry.

9 Again, just to show you the  
10 seriousness of it, we locate these quarantine  
11 barns away from the farm. They are high cost  
12 units that need to be manned by different  
13 personnel, they need to be handled in a separate  
14 way, and they are not emptied, in other words, the  
15 breeding animals inside are not removed and  
16 brought into the main farm until those animals  
17 have been tested or have gone through an  
18 appropriate down time.

19 So again, just to show you that there  
20 are buffers and barriers even in bringing in the  
21 animals. Probably one of the areas, you know, we  
22 have been challenged on keeping people out of  
23 barns because of, you know, various reasons. But,  
24 in fact, what we do with the quarantine barns, we  
25 build in the same biosecurity protocols for them

1 as we do for our main farms. So we extend the  
2 same procedures throughout the whole process to  
3 try and ensure that there is no inadvertent  
4 introduction of diseases. And there is tremendous  
5 amounts of testing, blood testing in some systems  
6 with numerous different diseases tested for. So,  
7 again, these are real processes that are going on  
8 every month, every two months, on many of these  
9 farms. And more and more farms are wanting to put  
10 the quarantine facilities in to protect their  
11 livelihoods.

12 Location is a very important aspect  
13 for us. We site barns, we check where barns are,  
14 we want to know where the neighbors are. We have  
15 heard reference to GPS earlier on various aspects  
16 of production, and one of those is on location of  
17 the farm, so that we know that they are protected.  
18 And having them in more remote areas is actually a  
19 benefit, and certainly having the opportunity to  
20 place barns in some of the municipalities where  
21 there is low animal density is actually an  
22 advantage to us and to our industry.

23 Artificial insemination is the way  
24 that most of the genetic material is moved in and  
25 out of farms now, and even that is becoming a very

1 high end business, where animals are actually  
2 tested, or collections are actually tested,  
3 collections of semen are actually tested with PCR  
4 testing on a routine basis. Some studs test all  
5 ejaculates or all collections from the boars. In  
6 our area, each week our boar studs are actually  
7 collecting blood samples and sending them to the  
8 Winnipeg Vet Lab to have them tested with PCR  
9 tests. So, again, very real concerns there for  
10 not wanting to move diseases around through semen,  
11 and semen is a vector of diseases, or for some of  
12 our diseases that we do.

13 This is one, you know, we are an  
14 industry on wheels, and a lot of our pigs move  
15 many times before they go to slaughter or even to  
16 a breeding farm. And our transportation industry,  
17 I'm not sure if you have representation from them,  
18 but I just wanted to say the intensity of  
19 transport protocol and transport sanitation,  
20 trying to ensure that trucks are not vectors of  
21 disease has really intensified. Some of the major  
22 haulers do a tremendous amount of work monitoring,  
23 they have washing programs, they have verification  
24 programs, they have auditing programs, and then  
25 there are independent third-party auditors that

1 will come in and actually double check the trucks.  
2 So, again, a very real component to farm  
3 biosecurity.

4           And we look at things, you can see  
5 seals on the middle truck, the gentleman on my  
6 right, I think it is your left, I don't know, they  
7 always reverse these things, but is actually doing  
8 plating to check for bacteria which the trucking  
9 companies do on a monitoring basis. And just,  
10 again, some of the technology, the bacteriology  
11 that they employ on the other side of the screen  
12 to show you differences in the light coloured ones  
13 or infected ones, and the dark coloured plates are  
14 the ones that have special treatments done to the  
15 trucks to show that they actually do mitigate the  
16 bacterial contamination and, therefore, by design,  
17 the viral contamination of trucks.

18           The one that I'm here to really  
19 reflect on is people movements, which is the one  
20 where we have been challenged. And if we are  
21 working with trucks and semen and pigs and  
22 quarantine barns, we feel as well that people as  
23 vectors, more so mechanical vectors rather than  
24 biological vectors. A biological would be, if I  
25 picked up influenza and went to a barn and

1 transferred it to the pigs, I would be a  
2 biological vector. But if I come in with gunk on  
3 my boots or on my equipment, et cetera, dirty  
4 fingernails, things like that, dirty clothes, then  
5 I become a mechanical vector.

6 And many of the biosecurity protocols  
7 respond out of the 1970s when the first real high  
8 health herds were coming, they spawned out of Foot  
9 and Mouth Disease, so we since then we have tried  
10 to whittle them down to more practical lengths of  
11 time.

12 But every farm has its comfort zone,  
13 and every farm ends up putting up a protocol of  
14 down time or a no pig contact rule, and they  
15 really try to restrict visitors. And they do for  
16 two points. One is very real, to reduce the  
17 contamination of the barns, but the other is to  
18 ensure that the people that are employed there  
19 understand the rules. If you had a three-day no  
20 contact rule and somebody makes an error and  
21 inadvertently gets in at two and a half days, we  
22 do have a buffer there.

23 But we do try to restrict people.  
24 There is scientific data to show people, without  
25 coming in and showering, can actually transfer

1 some of the fecal borne diseases. And so we do a  
2 lot of procedures to keep people and their  
3 movements in check, so that we do not have them as  
4 an inadvertent contaminant of the barn. And we  
5 have all kinds of different rules in place. The  
6 main thing that we are looking at is trying to  
7 protect the farm site from inadvertent  
8 contamination, people, vehicles, et cetera. So  
9 very real, we do put barriers and signs up, and  
10 those have a purpose for maintaining traffic  
11 control, people control, and some are even fenced  
12 to prevent wild animal control and escaping pig  
13 control.

14 We have had pigs in Saskatchewan,  
15 where there is only one pig barn known, where a  
16 boar was out scratching on the guy's wall one day  
17 and was summarily dispatched because of the  
18 biosecurity risk that it presented, and a fence  
19 was hastily built.

20 So there are some realities to all of  
21 this, and we just look at trying to keep people  
22 and the things they bring in out of there. And  
23 there are a whole host of in-barn protocols in  
24 place to protect us, shoe drops, boot transfers,  
25 showers. Some days I will have more showers than

1 I care to admit. And so, you know, barns, we go  
2 into barns now. I never wear clothing in the barn  
3 that came from my house or my vehicle, I'm always  
4 wearing clothing provided by barns, so again, a  
5 very real protocol.

6           Supplies are another one, and this  
7 kind of gets into one other area that has probably  
8 been mentioned a few times, especially since we  
9 are looking at some changes now over the next 10  
10 years or so with some of our sow housing  
11 procedures. We are very, very careful with how we  
12 bring supplies into a barn because we have seen  
13 disease outbreaks with contaminated boxes off of  
14 truck floors, et cetera. So many farms now  
15 actually fumigate products coming in. They take  
16 the outer boxes off, they fumigate with various  
17 disinfectants before they will bring them into the  
18 barn. This kind of goes to some of the issues  
19 that you may have heard on straw. If we go to  
20 this kind of extent on worrying about bringing in  
21 a bottle of disinfectant, you may start to  
22 understand some of the resistance that you hear  
23 from some of the producers on going back to straw  
24 based systems, et cetera. Apart from the fact  
25 that straw and pigs and whatnot, you know, pigs

1 like straw, straw ends up being contaminated with  
2 bird droppings.

3           Recently -- actually right now we are  
4 working on a leptospirosis program eradication  
5 project on a farm that got contaminated by racoons  
6 that got into his attic and then into some of his  
7 feed stuffs and urinated and that.

8           So we look at straw as a fairly major  
9 threat to overall housing of some of the very high  
10 health units. Other farms will get away with it  
11 that are farther down on the health protocols and  
12 the health pyramids, but again, we look at these  
13 things very much.

14           We are even into fly and mosquito  
15 control, and I will finish off with this, because  
16 we are now finding that mosquitoes and flies carry  
17 certain viral diseases and so, you know, looking  
18 at yard cleanup and making sure that feed spills,  
19 et cetera, are under control are very important to  
20 us.

21           And the last one, I think in light of  
22 some of what we are dealing with the media right  
23 now with Avian influenza, is really a high, high  
24 awareness on farms, trying to enhance the  
25 awareness of not getting bird droppings into the

1 barn. What happens when there is Mallard Ducks on  
2 the yard because there is a pond there, what  
3 happens when there is geese running around the  
4 feed mill picking up stuff, what happens when  
5 someone has to haul something out the back door,  
6 go out and tap on a bin, and steps back into the  
7 barn? So we are looking at bird control, Avian  
8 influenza being a concern, so again, to show you  
9 that we look at all aspects of the industry and  
10 our production systems to ensure that we don't get  
11 diseases in there, and finally, our furry friends.

12 I would like to finish just by saying  
13 that we have, about ten years ago when the Prairie  
14 Swine Centre in Saskatoon was planning for their  
15 Elstow unit, at two of their public meetings there  
16 was recommendations that they might want to look  
17 at putting a public viewing gallery in. One came  
18 from myself and the other came from Dennis  
19 Hodgkinson at two different meetings. We had sort  
20 of planned that as saying, we don't mind people  
21 seeing our barns, it is just we don't want them in  
22 our barns. But how could we do that?

23 The Prairie Swine Centre at their  
24 Elstow unit has a public viewing gallery that the  
25 public goes to. And it is really cool to be

1     there, because when you are there you see  
2     different production systems, you see what I see  
3     on a daily basis with the style of barns, we see  
4     behavioral differences, and sometimes you even  
5     luck out and you get to see the barns through the  
6     eyes of somebody that is visiting and sees the  
7     barn for the first time. So I think we encourage  
8     that the public see our industry, you know, we are  
9     such a small fraction of, you know, animal  
10    agriculture, such a small fraction of the  
11    population now, and I heard 1,400 farms or even  
12    smaller. There are opportunities for the public  
13    to see the pigs. There are people that have gone  
14    out of their way to bring pigs out. Arnie from  
15    Summerfeld Colony with Touch the Farm and, in  
16    fact, with Touch the Farm, and some of the farm  
17    shows are there.

18                   It is just that, you know, in trying  
19    to maintain our business, trying to maintain the  
20    health, and trying to set the precedents and the  
21    high bars that we need, which hopefully you have  
22    seen with some of the other protocols that we do,  
23    we just wanted to let the Commission know that  
24    there really aren't nefarious reasons for keeping  
25    people out of barns. We believe they are real,

1 very practical, and we feel that they are for the  
2 betterment of the pig at the end of the day.

3 I thank you for the opportunity and I  
4 hope I did not go over my time.

5 THE CHAIRMAN: Thank you very much,  
6 Dr. Sheridan. Is this need for biosecurity, is it  
7 in place for the pig's entire life?

8 DR. SHERIDAN: It is to different  
9 degrees -- good question. If it is a farrow to  
10 finish unit, absolutely, it is going to be with us  
11 until it goes to Maple Leaf or wherever it ends  
12 up. Different systems run differently. You will  
13 tend to find that finishing barns run, many times  
14 will run at a lower level. Nurseries tend to run  
15 at a very high level. Farrow sows tend to run at  
16 a very high level. In transport, when you are  
17 moving pigs to slaughter, let's say, the purpose  
18 of washing a truck is to protect the farm that the  
19 truck goes to, not to protect the pigs as much  
20 that are on the truck, they have little to gain  
21 from that. But animals moving from a nursery to a  
22 finishing barn, the level ticks up much, much  
23 higher. So they are exposed to various degrees of  
24 biosecurity through different parts of their life.  
25 I hope I answered the question.

1 THE CHAIRMAN: What kind of concerns  
2 are there then with hoop barns, which are somewhat  
3 open and --

4 DR. SHERIDAN: I will -- because I  
5 have promised to be honest -- I will tell you that  
6 I'm not a fan of hoop barns. But, mind you, I  
7 will also tell you that I hate winter and that.  
8 So I have never been a fan of them, but then again  
9 I'm also not a fan of working finishing barns, I  
10 prefer the sow side. But that said, I do have  
11 some concerns. It is much more difficult to  
12 control skunks and racoons, things that will carry  
13 diseases like say leptospirosis, which could be a  
14 human health food borne disease. It is another  
15 birds, I guess, I don't know whether, I think we  
16 are all on a little on hyper-edge because of Avian  
17 influenza, but that said, we do worry about birds,  
18 tuberculosis, salmonella and perhaps influenza.  
19 And that said, and again, I don't like winter and  
20 I don't think they like winter, and again that is  
21 a personal bias. So I haven't really answered  
22 your question other than give you some of my  
23 personal biases I think.

24 THE CHAIRMAN: All right. Wayne.

25 MR. MOTHERAL: I have just enjoyed the

1 presentation. I hear so much about the  
2 biosecurity and the reason why the general public  
3 can't go in the barns and that, and you have given  
4 us a good perspective of that.

5 DR. SHERIDAN: The Glenlea Research  
6 Station has, I noticed some funny construction  
7 when I was there a few months ago and asked what  
8 that was for, and that is for when they do get  
9 their funding to actually put viewing galleries,  
10 I'm not sure if it is on both barns, but I believe  
11 it is on both barns, so the public will have  
12 access to more hog production style right at  
13 Glenlea, which excites me quite a bit.

14 MR. YEE: Yes, Dr. Sheridan, I might  
15 have missed this, but I notice when you do address  
16 the issue of transportation, and this may not be  
17 appropriate, but feeds are brought into the barns.  
18 So are biosecurity taken on delivery of feeds or  
19 anything special done in regards to the feed  
20 products?

21 DR. SHERIDAN: There is two types of  
22 feed production, one is purchased and the other is  
23 on the farm. If we go to the process feed --  
24 actually this afternoon I was at a meeting and a  
25 fellow from the feed mill was saying, what are we

1 going to do about all the geese that are around  
2 our feed mill. There are biosecurity protocols,  
3 procurement protocols, and most of those feeds are  
4 cooked, so there has also been a pasteurization  
5 process. Then they travel in, in large trucks,  
6 sealed trucks, they are augered into sealed bins.  
7 As long the trucker doesn't forget to drop the bin  
8 lid, they are pretty secure in that regard.

9 On farms more and more of the systems  
10 are, you know, the grain goes from the field to  
11 maybe drying facilities or whatever, into large  
12 bins, and the bins are secured against that.  
13 Periodically you will see piles of grain, when  
14 there is a bumper crop you will see piles of  
15 grain, and that gets worrisome, especially if some  
16 of our clients might be buying that grain. There  
17 is also, most producers when they are buying grain  
18 will talk to the brokers and ask where it is from,  
19 is it from a pig farm, is it from a beef farm, or  
20 is it from just a grain farm? And they try to ask  
21 those questions. So it is still a risk site, but  
22 I think it is a minimum risk site.

23 MR. YEE: And maybe one last comment I  
24 would make, you might not have been aware of it, I  
25 think it was earlier on, it was suggested as far

1 as the general public and the misconception or the  
2 perception they are getting of this biosecurity,  
3 not being able to see what goes on behind the  
4 closed doors, it was suggested that maybe it be  
5 videotaped or a video camera so that, you know,  
6 they could see what is going on in that way,  
7 without actually being there and bypassing the  
8 biosecurity protocols.

9 DR. SHERIDAN: I just purchased a \$700  
10 camera and I am going to purchase a \$250  
11 underwater glass case so that we can go in and  
12 start do videotaping for training sessions, et  
13 cetera. Yes, that is a good point. I do  
14 encourage anyone, though, that's ever in Elstow,  
15 Saskatchewan, for whatever reason, that if you  
16 have a day to kill, Prairie Swine Centre viewing  
17 gallery is pretty awesome.

18 MR. YEE: Thank you, Dr. Sheridan.

19 MR. MOTHERAL: Just one more question.  
20 You mentioned the feed bins, as long as they are  
21 closed up, is there any protocol at all of those  
22 bins having to be cleaned out every once in a  
23 while or --

24 DR. SHERIDAN: Most farms -- again  
25 good question -- the majority of times that we

1 would be looking at cleaning the bins, certainly  
2 in storage bins, would be prior to a new crop,  
3 which seems just to be more tradition than  
4 anything. And the other would be, especially  
5 where people are purchasing feed from feed mills,  
6 on occasion it will come in a bit warm or humid  
7 and you start getting bridging or you get some  
8 consolidation and perhaps even molding. So I  
9 would say that the majority of our cleaning of  
10 bins will be sort of an annual inspection, get in  
11 and rinse them out if they need it. But as far as  
12 a routine monitoring program, no.

13 A few years ago, John Gad from the  
14 U.K. was over, and he was really promoting  
15 manholes for the bins so that you could actually  
16 get in, because a lot of people have vertigo and  
17 don't want to go up them, but actually having a  
18 side manhole that you could look in and check, you  
19 know, it would be a very good idea.

20 THE CHAIRMAN: Thank you very much,  
21 Dr. Sheridan. Your presentation tonight was one  
22 that we really haven't heard before, so it was  
23 really very interesting. Thank you.

24 Next is Sam Hofer. Mr. Hofer, would  
25 you state your name for the record, please?

1 SAM HOFER, having been sworn, presented as  
2 follows:

3 MR. S. HOFER: Good evening ladies and  
4 gentlemen. I have with me Dr. Loren Bailey. If  
5 there is any questions to be asked about nutrients  
6 and soil sampling, he would prefer answering the  
7 questions.

8 Good evening ladies and gentlemen of  
9 the Clean Environment Commission. My name is Sam  
10 Hofer, and I stand here today as a representative  
11 of the Spring Valley Hutterite Colony. Our colony  
12 is located 15 miles southeast of the City of  
13 Brandon in the Rural Municipality of Cornwallis.  
14 Our colony consists of 18 families.

15 Before I get into the main part of my  
16 presentation, allow me to paint a small economy  
17 picture of agriculture for you. When the  
18 subsidies for transportation of grain to the ports  
19 were removed in the 1990s, farmers on the  
20 prairies, particularly in Manitoba, were most  
21 affected. All of a sudden producers found that  
22 they could no longer grow and ship crops and make  
23 enough money to support their farm families.  
24 Transportation costs ate up one-third of the gross  
25 receipts and most of the profits from our crops,

1    which forced forcing farmers to do one of three  
2    things for survival.  One, get out of farming  
3    altogether; would that be the answer?  It is a  
4    question mark.  Number two, expanding farm  
5    operations; number three, or expand and get into  
6    livestock production to survive.  That is what was  
7    our choice and a decision made with our members.

8                    With rising crop input costs and  
9    commodity prices which have essentially flatlined  
10   over the last 30 years, many producers have looked  
11   to livestock production, and more specifically hog  
12   production to survive.  In the early '90s, Spring  
13   Valley Colony had to make a difficult decision.  
14   With low grain prices, the Crow rate gone, and  
15   several families to support, we had to make a  
16   decision to expand our farrow to finish operation  
17   from 550 sows to 1,050 sows for survival of our 18  
18   families.

19                   We are proud to be a part of  
20   Manitoba's pork industry, which is recognized as  
21   producing some of the finest quality pork in  
22   Canada, as well as the world over.  Manitoba  
23   exports approximately 80 per cent of the pork to  
24   other countries like United States and Japan,  
25   where consumers demand a pork quality that we are

1 able to produce.

2 We are also responsible to our  
3 environment, because the survival of our industry  
4 is depending on the health of the environment and  
5 its resources. And you can rest assured that we  
6 are more tightly regulated now than ever before.  
7 There are more regulatory safeguards in place to  
8 protect our environment now than even the last ten  
9 years.

10 For example, the New Water Protection  
11 Act, which was passed just last year, clearly  
12 states that no person shall discharge, release or  
13 apply a substance containing nitrogen or  
14 phosphorous directly to a water body or into the  
15 groundwater feature, except under the authority of  
16 Environmental Act.

17 In some towns, communities are still  
18 allowed to discharge wastewater effluence within  
19 the prescribed limits of the Environmental Act  
20 License. However, discharges from agriculture is  
21 not allowed. Hog producers know that the  
22 consequences of non-compliance can be severe to  
23 our environment, to our livelihood, so we have to  
24 adjust to our environmental management practices  
25 to comply. For example, winter spreading of

1 manure is no longer allowed, so many producers had  
2 to build additional storage to contain manure  
3 through the winter months before spreading into  
4 the spring, summer, or fall.

5           Furthermore, agriculture will soon be  
6 required to adhere to the proposed nutrient  
7 management and water quality management zones  
8 regulations, as well as the proposed phosphorous  
9 threshold limits. Under the proposed phosphorous  
10 threshold limits, Manitoba agricultural producers  
11 will be required to have access to a large enough  
12 land base to balance nutrients on the basis of  
13 phosphorous limits, not just nitrogen limits, as  
14 has been done in the past. This requirement makes  
15 these regulations more restrictive than even other  
16 jurisdictions in Canada, such as those in Ontario.

17           Nutrient management: Nutrients,  
18 regardless of the source, whether it be commercial  
19 fertilizer or from manure, are very valuable and  
20 necessary inputs to crop, grass and forage  
21 production. We don't want to misuse it, nor do we  
22 want to lose it unnecessarily to the environment.  
23 We have used manure as nutrients for years on the  
24 colony to offset the cost of commercial  
25 fertilizer.

1                   We hire a consulting firm of certified  
2 agronomists to test our soils and manure in order  
3 to develop a scientifically sound nutrient  
4 management plan. The firm is AgriTrend Agrology  
5 Ltd., which is headquartered in Red Deer, Alberta,  
6 but has offices and skilled professionals across  
7 the prairies, including Manitoba. Ron Curtis, he  
8 is on the sick list today; Larry Penner is one of  
9 our gentleman here; Dr. Loren Bailey is one of our  
10 guys for consulting us on the farm. AgriTrend  
11 works with our field manager to oversee the soil  
12 testing on every field and to develop nutrient  
13 plans which balance the nutrients needed for our  
14 crops with soil nutrients availability, and manure  
15 applications.

16                   We inject our manure in fields that  
17 need higher NPK levels to grow crops like canola,  
18 corn, alfalfa. We also rotate manure applications  
19 in fields every three to four years to allow  
20 nutrients level to be depleted. The high cost of  
21 energy and commercial fertilizer can be offset by  
22 the use of manure, making it a very valuable  
23 source to Spring Valley Colony Farms.

24                   To better illustrate this benefit for  
25 you, our 1,050 sow farrow to finish operation

1 produces approximately 6,500,000 gallons of manure  
2 each year. Every 1,000 gallons of manure contains  
3 approximately 21 pounds of nitrogen. On average  
4 we inject 3,500 gallons of manure per acre of land  
5 for a total of 73.5 pounds of nitrogen per acre,  
6 which is available for plant nutrients out of the  
7 3,500 gallons. The current price of nitrogen is  
8 53 cents a pound, which we could put is priced  
9 higher right now. If we inject our manure on  
10 1,857 acres of land at this rate, the nitrogen  
11 alone is worth \$72,339, without the phosphate,  
12 without the micronutrients in the manure, a very  
13 natural, good source of nutrients. We wouldn't --  
14 why would anybody misuse or waste a valuable and  
15 natural source of nitrogen?

16 Manure management: With regards to  
17 manure, let's face it, one of the acceptable  
18 byproducts of the livestock industry is manure.  
19 This includes all livestock sectors, not just the  
20 hog sector. Yet we hear many uninformed people  
21 say that the hog industry is entirely to blame for  
22 our water quality problems, which is wrong. You  
23 only need to read the report recently written by  
24 Manitoba Conservation called "Examination of the  
25 Environmental Sustainability of the Hog Industry

1 in Manitoba" to know this. In this report  
2 agriculture, as a whole, was estimated to contain  
3 only 6 per cent of the nitrogen load and 15 per  
4 cent of the phosphorous load to Lake Winnipeg.  
5 These numbers include contributions from the other  
6 livestock sectors like beef, dairy, poultry, as  
7 well as grain and oilseeds and vegetables. But  
8 the hog industry was singled out.

9           You might ask, can agriculture's  
10 potential impacts on water be further reduced?  
11 All I can say is that producers are already going  
12 to a great extreme and expense to meet these  
13 requirements of new stricter regulations.

14           For example, under the new Manitoba  
15 Livestock Mortality and Manure Management  
16 Regulations under the Environment Act, the  
17 management and the disposal of manure is more  
18 tightly regulated now than ten years ago. The  
19 regulations require larger livestock operations to  
20 file a manure management plan which describes how  
21 we manage and dispose of our manure. AgriTrend  
22 Agrologist Limited submits the manure management  
23 plan on behalf of the hog operation of Spring  
24 Valley Colony Farms. And we hire Red Hand from  
25 Boissevain, Souris, Boissevain, a certified manure

1 applicator to dispose of our manure in accordance  
2 with the manure management plan. We are doing it  
3 totally out of our hands. We are giving it over  
4 to AgriTrend Ltd., Red Hand out of Boissevain, to  
5 apply the manure so we are totally free to the  
6 environment and that we have got a friendly  
7 neighborly approach all the way around our colony,  
8 without a complaint in many, many years. And we  
9 have got neighbors within a half mile to a mile,  
10 to two miles, to five miles.

11 Water quality: Good water quality is  
12 vital to the health of the family and hog  
13 operation. Spring Valley moved to Brandon,  
14 Manitoba in 1951. We test our water every year to  
15 monitor trends or changes in water quality. As of  
16 today, we are pleased to report that we still have  
17 top quality water with no nitrates, no coliform,  
18 no bacteria, it is still fit for consumption by  
19 our infants over 51 years of use. Can we  
20 criticize the hog industry? After 51 years we  
21 moved out of Elie, Manitoba, and as of today  
22 checking it, the school board usually comes out  
23 before the new year starts up and they want water  
24 samples, and they always ask for our water out of  
25 Brandon, Manitoba here, where can you still find a

1 quality water like that? So where is the problem?  
2 If all hog operations cause water quality  
3 problems, could we make such a claim about our own  
4 water? We feel that the hog industry is often  
5 falsely blamed for many of the water quality  
6 problems you will probably hear about over the  
7 course of these hearings.

8 Environmental management: Responsible  
9 environmental management is a part of the overall  
10 operation of our hog barns. We have worked  
11 closely with Manitoba Conservation, the Rural  
12 Municipality of Cornwallis, and our ward  
13 Councillor, Emil Egert, in obtaining a permit for  
14 manure storage facilities.

15 Emil, he was supposed to be here  
16 today, but I had a talk with him, he moved in 14  
17 years ago, one mile east of our yard. And he said  
18 I have still got to see the first time to smell  
19 any hog or lagoon smell in 14 years. He moved in  
20 from Stonewall, Manitoba, and bought a farm one  
21 mile east of our yard. And he is a councillor and  
22 he worked with us.

23 We hired Glen Newton, a registered  
24 professional engineer from Brandon, to design our  
25 earth manure storage facilities and the monitoring

1 well network around our lagoon, monitored every  
2 year. Who is monitoring? Not Spring Valley  
3 Colony -- AgriTrend, Larry Penner. We are putting  
4 it out of our hands, we are putting the risk into  
5 professional services. It is costly, but it is  
6 done properly. Mac's Rental Construction from  
7 MacGregor, Manitoba, which has a lot of experience  
8 in building, engineering earth storage facilities,  
9 was hired to construct our manure storage in  
10 accordance with regulations and engineering  
11 standards. Our colony has been complying with  
12 Manitoba new regulations and it costs our colony  
13 additionally \$55,000 each year for independent  
14 soil testing, manure management plans for each  
15 field, and manure application services. You may  
16 hear similar cost figures from other operations as  
17 well.

18 In our opinion, these requirements  
19 serve to improve public confidence in the  
20 sustainability of our industry, however, in view  
21 of the high cost of environmental management, we  
22 recommend that the government consider providing  
23 financial support to offset the cost of these  
24 services for a cleaner environment. That is what  
25 we need. David wrote out, the farmers need more

1 opportunity for a cleaner environment so we can  
2 survive. It is no use, every year there is more  
3 small family farms disappearing around our yard,  
4 not on account they don't want to farm. The poor  
5 children, the boys, they can't see no more future  
6 in the farm with the high cost of input, harsher  
7 restrictions, requirements, and they are taken off  
8 the farm, which we don't like ourselves. We have  
9 a close relation with our neighbors, we enjoy  
10 them, we work together, we thrash together, and we  
11 seed together and everything. Very close, they  
12 come in there with our machines, and we drive in  
13 their fields with their machines, very  
14 cooperative.

15 In closing, I would like to thank you  
16 for giving me this opportunity to speak at this  
17 hearing and to shed some light about the hog  
18 industry and our own operation. I hope the  
19 audience will better understand the contributions  
20 agriculture and the hog sector are already making  
21 to protect our environment. Furthermore, I hope  
22 the audience is now more aware of some of the  
23 regulations which are placed to ensure that  
24 livestock expansion in Manitoba can take place in  
25 a sustained fashion.

1 THE CHAIRMAN: Thank you very much,  
2 Mr. Hofer. Edwin?

3 MR. MOTHERAL: No, thank you.

4 THE CHAIRMAN: Thank you very much,  
5 Mr. Hofer, for coming out here this evening.  
6 Thank you.

7 The final presentation of the evening,  
8 Gordon White. Would you state your name for the  
9 record, please?

10 MR. WHITE: Gordon White.

11 GORDON WHITE, having been sworn, presented as  
12 follows:

13 THE CHAIRMAN: Go ahead, sir.

14 MR. WHITE: I would like to thank the  
15 members of the CEC for the opportunity to address  
16 this hearing. I would also like to thank all of  
17 the people involved in agriculture, with actual  
18 hands-on experience, for taking the time to make  
19 presentations.

20 I sympathize with the Commission on  
21 having to listen to scores of concerned citizens  
22 making presentations based on poor information, no  
23 experience with viable farming practices or the  
24 real facts. I could have spent hours searching  
25 the internet for loads of articles and pictures to

1 flood you with data that may or may not be true,  
2 for I can post an article on the internet, and  
3 most people who read something in print, whomever  
4 wrote it, believe it must be true. Even pictures  
5 can be easily altered to make them appear to be  
6 totally different to make a point.

7 I decided to make a presentation on  
8 farm practices that I'm willing for you to come  
9 out and verify on my own farm that has been in my  
10 family for over 100 years. If you want to know  
11 where you are going, you have got to know where  
12 you have been.

13 A little history on my farm. My great  
14 grandfather broke most of my farm in the early  
15 1900s. It has been mostly grain farmed ever  
16 since. Small amounts of fertilizer were first  
17 used in the '50s, so some of this land was  
18 depleted of nutrients and organic matter by  
19 removal of crops, hay, and beef for over 50 years.  
20 Summer fallow was used to give the land time to  
21 break down organic matter into nutrients to grow a  
22 good crop. With this practice came soil erosion  
23 by wind and water. There are fence lines over  
24 eight feet high in my area from wind erosion and  
25 lots of gullies washed out from the water.

1                   In the '70s, my father and grandfather  
2     were using more chemical fertilizers to grow a  
3     better crop, but only replacing what each crop  
4     used. For example, if you grow a good crop, you  
5     add a little more fertilizer, if you grow a poor  
6     crop, you add a little less, which worked well  
7     because after a good crop you could afford a  
8     little more inputs.

9                   In the late '70s, when I started  
10    farming, we went zero till or minimum till, which  
11    means leaving the stubble in place to eliminate  
12    wind and water erosion, thus limiting evaporation  
13    of water so the crops had more to use. This stage  
14    in the farm's history also saw the elimination of  
15    summer fallow and the beginning of continuous  
16    cropping. This also meant more chemical  
17    fertilizers and weed chemicals, but only  
18    maintained the farm and slowly started to improve  
19    the soils.

20                  In 1999 my farm started using hog  
21    manure as a nutrient. This meant quite a few  
22    changes. Manure management plans had to be done,  
23    soil tests had to be done each year, which were  
24    only done every five or six years before. With  
25    each passing year or so, the rules would be

1 increased to where they are today, the most  
2 stringent on the continent. This is fine as long  
3 as they stay science based and logical.

4           Personally, the biggest -- or sorry,  
5 yes, I helped bring these hogs barns to my area  
6 for multiple reasons. The barns in my  
7 municipality create 26 full-time jobs, plus some  
8 summer student jobs, with a payroll close to  
9 \$1 million, and they pay 80,000 in taxes that not  
10 only helps the municipality but also the school  
11 division.

12           Personally, the biggest advantage to  
13 my farm has been the manure. Without it I  
14 probably wouldn't be here today making this  
15 presentation, as I would likely not be farming. I  
16 pay for the manure based on applied nitrogen. I  
17 pay 60 per cent of an NH3 price, which is  
18 anhydrous ammonia, a deadly chemical form of  
19 nitrogen that is safe if handled properly.

20           I have supplied you, which are the  
21 last three pages of the document, with three field  
22 histories from my farm. And I also summarized  
23 them, I just transferred all of the figures so  
24 that you could see all nine years on one page. So  
25 you can see actual applied nutrients, manure and

1 chemical, over the past nine years and the  
2 corresponding soil tests. After you go over  
3 these, you may wonder why the soil tests fluctuate  
4 up and down sometimes, regardless of what was  
5 applied for inputs. Well, anyone in agriculture  
6 knows that mother nature is not only inconsistent,  
7 but sometimes downright mean to farmers. So if  
8 you grow a great crop, the nutrients afterwards  
9 tend to go down. And if you have a wreck, they  
10 tend to be up. And sometimes the soil test just  
11 does not make any sense, but it is the best  
12 science available to make our decisions on.

13 As you can see, there is no problem  
14 using hog manure as a fertilizer. There are some  
15 years that the results get high because of a poor  
16 crop, but with adjusting the following year, the  
17 problem disappears.

18 The field northwest 14/6/23 you may  
19 notice has an increase in P, or phosphate. This  
20 is due to the fact that I didn't concern myself  
21 with the amount of P applied until the regulations  
22 changed. It is still not high, but I will be  
23 rotating the higher P manure to other fields and  
24 apply lower P manure to this one to alleviate this  
25 before it gets to be a concern. So you see, the

1 rules do work and farmers do pay attention. The  
2 higher P is mostly located in the solids, so you  
3 can manage which fields these are applied to.

4 My soil tests are also GPS  
5 benchmarked. This allows me to get the most  
6 consistent results possible from a sometimes  
7 variable science. With the advantage of manure, I  
8 am hoping to try and get my farm back to similar  
9 health that it was when my great grandfather first  
10 broke it. I figure it should take me close to 50  
11 years of applying manure and zero row till to get  
12 even close to resemble the nice rich prairie soil  
13 it was at the turn of the century.

14 The so-called science the province is  
15 using to say that nutrient levels in the lakes and  
16 rivers has gone up since the '70s could be right,  
17 and if it is, they need to start pointing the  
18 finger somewhere else other than agriculture, at  
19 least in this part of the province, because all  
20 the land around my area is far more  
21 environmentally friendly now than it has ever  
22 been. As you likely know, cattle were fed on the  
23 rivers all winter and cropland blew and eroded,  
24 depositing nutrients in the air and water up to  
25 the late '70s. Now you rarely see a dirt plume

1 from a blowing field or huge deltas of soil washed  
2 downstream by water erosion letting their  
3 nutrients continue to the lakes. So if the levels  
4 have increased that much, they need to look at  
5 different areas and causes, not the easy ones to  
6 pick on.

7           On the topic of smell, harmful  
8 emissions and poor work place, I also have a few  
9 comments. By living less than one kilometre from  
10 6,000 finisher hogs, yes, they smell like pigs,  
11 the odour is strong, especially when the lagoons  
12 are agitated while application is done, but not a  
13 big problem for most of the year. I have rarely  
14 been bothered when the lagoons are straw covered,  
15 and the smell only lasts as long as the wind stays  
16 in perfect alignment with the yard. It is  
17 impossible for anyone to say, even if they lived  
18 beside the worst operation in world, that they  
19 always smell them. This is rural life with  
20 different smells, noises, dust, and traffic than  
21 in town or cities, so get used to it or move to  
22 the city for your perceived lifestyle.

23           As for the work environment, I could  
24 tell you some big stories, good and bad, but will  
25 only tell you one of my family's own. My youngest

1 daughter worked a 3,000 sow barn for two summers  
2 for a summer job, as a farrowing technician. She  
3 has had asthma since a young child. And the  
4 environment in the barns did not bother her nearly  
5 as much as going to university in downtown Toronto  
6 at the U of T; smog caused by people I suppose.  
7 She learned work in a team environment and gained  
8 some job skills that she will use the rest of her  
9 life. No, she did not want to make a career out  
10 of it, but she also does not want to be a doctor.  
11 But her ability to work with others and handle  
12 animals has gotten her a summer job as an usher  
13 for the Toronto Blue Jays this year. Handling  
14 drunk and disorderly humans she says is worse.

15 Manure application is an ever changing  
16 thing. On my farm we have gone from drag hose  
17 with small cultivator, to large tankers with a  
18 cultivator, to tankers with an AerWay applicator,  
19 to drag hose with an AerWay injector applicator,  
20 and I don't expect it to be the last change, but  
21 it is working well. As better methods of  
22 application come along, I imagine there will be  
23 changes. Nobody wants to waste nutrients they are  
24 applying, for the alternative is very expensive.  
25 Commercial fertilizer is hitting an all time

1 record.

2                   The rules and regulations are extreme  
3 in this industry and the ag producers have been  
4 complying to the best of their ability. But if  
5 they are increased further before science catches  
6 up, farmers will not be able to continue to farm.  
7 If this happens, then you will only have corporate  
8 farms, everyone's worst fear. Too many say that  
9 these corporate, or large, or mega barns or farms  
10 have driven out the family farms. Not true. I  
11 have never seen a farmer driven out by anyone  
12 other than the companies that gouge us on our  
13 inputs, farm machinery costs, fuel, et cetera.  
14 Also consumers drive most farmers off the farm by  
15 only wanting to spend a very small part of their  
16 income on food, especially on locally produced  
17 food. By this the only ones that can make a  
18 living are the large, least cost producers. These  
19 large producers are also the only ones that can  
20 manage the extra costs associated with more rules  
21 and regulations. Most farms, small farms sell,  
22 and the only ones bidding are the larger expanding  
23 ones. So it won't be long before there aren't any  
24 memories of grandma's farm left to go see, other  
25 than the hobby farms that people pensioned off

1 from the city, that want rural life.

2 In conclusion, I hope the Commission  
3 recommends to the government that the hog  
4 industry, along with all livestock and agriculture  
5 in general, is environmentally viable and  
6 sustainable. That if they increase the  
7 regulations, they had better be prepared for major  
8 costs of updating soil test technology application  
9 methods, and enforcement. Some of these have not  
10 even been discovered yet. Another reduction in  
11 the number of the farms, especially small farms,  
12 and you better find them jobs or increase your  
13 welfare budget, because they will come to the  
14 city. Just remember, a farmer is a steward of the  
15 land, and if he is not, he will not farm for long.  
16 So you better start looking for the real cause of  
17 the problem, because you haven't found it yet.

18 I am a fourth generation Canadian  
19 farmer. I don't own any hogs anymore, I used to,  
20 and I only wish to use manure responsibly on my  
21 less than 2,000-acre family farm, so that I don't  
22 have to expand to 5,000 acres to be able to feed,  
23 clothe, and educate my family. I have also been a  
24 municipal councillor for 14 years. I have sat on  
25 the West Souris River Conservation District for

1 nine years. I have been a member of the Manitoba  
2 North Dakota zero till association for 30 years.  
3 I have been a Keystone Ag Producer member for as  
4 long as I can remember, and I have sat on their  
5 board for the last four years. Thank you.

6 THE CHAIRMAN: Thank you, Mr. White.  
7 Where is your farm?

8 MR. WHITE: I don't own a barn.

9 THE CHAIRMAN: No, where is your farm?

10 MR. WHITE: My farm is just east of  
11 Hartney, Manitoba.

12 THE CHAIRMAN: Thank you. Wayne.

13 MR. MOTHERAL: No, I don't think I  
14 have any questions. I thank you for your  
15 thoughtfulness in this, and showing the struggles  
16 that the farmers are having today. Thank you.

17 THE CHAIRMAN: Thank you very much,  
18 Mr. White.

19 That brings the evening proceedings to  
20 a close. We will reconvene here tomorrow morning  
21 at 9:00 o'clock.

22 (Adjourned at 9:22 p.m.)

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CERTIFICATE

CECELIA REID and LISA REID, Court Reporters, in the Province of Manitoba, do hereby certify the foregoing pages are a true and correct transcript of my Stenotype notes as taken by me at the time and place hereinbefore stated.

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Cecelia Reid

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Lisa Reid

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