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Good Afternoon Ladies and Gentlemen

My name is Dan Klippenstein and I'm the President of Excel Playgreen Group Inc which is a hog production company operating a number of hog farms in Manitoba (two of which are in La Broquerie). In addition we operate a manure application company which works on quality manure application to farm land for our farms and commercially.

I grew up on a small hog farm in the New Bothwell, MB area where my brother farmed till 2003. My career path took me in a different direction and I left the family farm to attend the University of Manitoba where I graduated with a Degree in Agriculture majoring in Animal Science in 1979. I then worked in the Manitoba Swine industry as a Swine Specialist for a number of private companies until 1991 when I became involved in my own hog operation. In 1994 I graduated from the U of M with a Masters Degree in Business Administration.

I have been involved in hog farming since I could walk. I have seen the system develop from a loose housing system that gives little animal care, to a controlled quality animal care system incorporating the use of stalls to house the sows resulting in less fighting with better individual feed availability and care. For all the people who claim that they are concerned about animal care on the farm and advocate changing the systems because they know best, I recommend they spend a year working on a hog farm and learn how to take care of pigs. As farmers our job is to care for the animals, the environment and protection of the water. That is why at our farming operations we have implemented a number of programs to help reduce the environmental impact.

***Company Impact:***

I started Excel Playgreen Group Inc. in 1994 with the help of family and friends as investors. Excel Playgreen currently employs about 50 people in Manitoba with a payroll of over \$1.5 million. In addition we purchase over \$5.0 million of feed to feed the pigs plus hundreds of thousands of dollars in other services from Manitoba suppliers. This has a large impact on the local economies around the barns.

We also sell many of our hogs into the USA which provides additional trade dollars for Manitoba and our economy. Being able to produce a product cheaper than our competitors is what drives agricultural trade. Some of the policy's the Government has adopted are increasing our costs. The government should not develop artificial barriers that create costs with very little benefit.

Currently the market in Canada is an extremely tough situation. The market price decreased by 15% compared to the year before, with no decrease in input costs according

to Stats Canada. Farmers other than supply managed farmers are not able to pass on any additional cost. Hog farmers take the price the market gives them. Thus increased regulation directly impacts the survivability of a farm enterprise.

Thus farms have to continually strive for greater efficiency's to remain viable in a very competitive industry.

### ***Construction:***

When we constructed the first barn we built a concrete manure storage tank because the soil was sandy and was not good for lagoon construction. An earthen lagoon would not have been as secure a storage system to store our manure. This was before lagoon permits were required and lagoons could be built without much thought. Concrete lagoons also help reduce odor which benefits the neighbors.

When we expanded the first farm we put in a manure separation system so that we could separate some of the solids from the liquids which give more control over application rates with lower phosphorus levels in the more liquid tank. This was so that we had more opportunity to manage the resources of manure for maximum environmental benefit.

### ***Technological Advances:***

With that same concern we have adopted the use of many new technologies to help decrease cost. These technologies also improve the environment through more efficient use of nutrients and less excess. The following are some of the technologies we have adopted at our farms and I will describe each and how it benefits the environment and reduces nutrient load on the land.

1. Phytase Use
2. Net Energy Formulation
3. Phase Feeding
4. Segregated feeding
5. Water conservation
6. Soil Testing for manure application
7. Water use ( use 10% of the water our land receives in rainfall)
8. Manure Application

### ***Phytase:***

Phytase is a product that has become more available in the last few years and become less expensive. It is an enzyme that breaks down the phytate phosphorus stored in the grain and makes it available to the animal in its production process by way of the TCA cycle. We have used this enzyme for a number of years on a trial basis and went to full inclusion in all our rations about two years ago. The enzyme can replace inorganic

phosphorus in late grower finisher rations and still maintain growth rates. This reduces the amount of phosphorus that we apply to the land.

#### ***Net Energy Formulation:***

Just recently we have gone to net energy formulation for our rations. This has decreased the amount of protein in the ration and utilizes more amino acids, thus reducing the total nitrogen excreted by the pigs. This decreases the amount of nitrogen in the manure and reduces the amount of nitrogen that needs to be applied to the land.

#### ***Phase Feeding:***

Phase feeding is another management process that we have adopted at our farms. This management strategy attempts to target the right amount of nutrients available at the right time. As pigs get older they need less protein, phosphorus and other nutrients in their diet. Therefore by phase feeding the nutrients that they require are provided without creating excess or waste nutrients that need to be disposed of later. This practice not only saves the environment it saves feed costs as well.

#### ***Split Sex Feeding:***

Another practice that is similar to phase feeding is split sex feeding where males and females are feed differently based on their needs. This reduces excess nutrients that not utilized properly by the one sex since it is more than it needs and makes sure the other sex gets an adequate supply of nutrients, thus reducing excess nitrogen and phosphorus in the manure.

#### ***Soil Samples:***

We monitor the soil so we can determine how much nitrogen we can safely put on the soil. Now with the new regulations we will also monitor the amount of phosphorus that is in the soil and how much can be applied.

#### ***Water Conservation:***

One of the misconceptions is that hog barns waste lots of water because it is free! I'll have you know that the water that is wasted is not free, it costs about  $\frac{3}{4}$  of a cent to pump every wasted gal of water onto the field. So we have undertaken a number of measures at the farms to limit water use.

1. Wet/dry feeders:

We installed wet/dry feeders to reduce water use and water wastage. This feeder collects all the water in a trough so that the pigs can drink it later instead of letting it fall into the pit.

2. Maintenance Program:

Maintenance program has been established to repair any dripping water equipment immediately, so that the amount of water lost is reduced.

3. Hot Water Washing:

The farms use hot water to wash which reduces washing time and the amount of water used.

Water use is less than 10% of the water that falls on the land where the barns are located. When calculating rainfall on total lands owned, water use would be less than 2% of annual rainfall.

***Manure demand:***

In areas where farms are located there are many farmers who very much appreciate the manure from our farms on their lands, since it improves their crops and reduces their costs. We give this manure to the farming neighbors and pay the costs of application. We do this to be good neighbors and in many cases they return this favor by providing us straw or helping us with other services as good neighbors do. Many of our neighbors would like us to build additional farms so they could get more manure.

***Manure Application:***

There are many technologies used to monitor the proper application of manure:

1. ***Nitrogen testers:***

Nitrogen testers which test the manure are used on site by our application company to monitor the amount of nitrogen that is applied to the land and the concentration of nitrogen in the manure.

2. ***GPS System:***

The application equipment we operate has a GPS system on board which can track the application rate and provide detailed analysis of how much manure was applied to the land as well as where it was applied.

3. ***Injection System:***

Manure when applied to cultivated land is injected into the soil to maximize plant availability and crop growth. When applied to grass it is dribbled on to the land and the grass takes up the manure.

#### ***4. Manure Analysis:***

Manure analysis done on the manure at a recognized lab to establish a nutrient level in the manure. This is used for planning future application in conjunction with the Nitrogen tester at the site.

#### ***Conclusion:***

With all the steps we have taken to be environmental stewards the current situation is that we will have to increase our land base to meet the current regulations.

#### ***The Push Bush Law:***

In order to meet some of the demands of the new regulations we will have to create more grassland. This means clearing more bush to create more land creating deforestation of the area. While I'd prefer to leave the land in bush we unfortunately will have to start removing bush this year in order to meet the 2013 deadlines. We are fortunate that we own two sections of bush which we can turn into hay land to grow hay crops and fertilize with our manure.

Our current spread lands would be more than sufficient under the current nitrogen application rules and quite possibly could be adequate for the phosphorus application rules if adequate time was given to develop and adopt new technologies that could decrease the need for additional land. It is important that the government provide significant financial assistance to the industry to help us adjust and develop new technologies.

#### ***1% hogs 99% Politics:***

Since the economic environment is currently unprofitable, even without the "pause" there would have been few new barns built. What the "pause" did was create in the mind of the population that there is something wrong with hog production or the government would not have put on the "pause".

The new regulations will do little if anything to reduce the phosphorus load in Lake Winnipeg. Being that only 1% of land is manured with hog manure. I would contend that if there were no hog barns in Manitoba there would be no change in the amount of phosphorus that would enter the lake. Since all the land that currently receives hog manure would receive inorganic phosphate in order to grow crops the total phosphorus on the land would stay the same. As hog farmers we have done a good job in adopting new technologies to reduce environmental impacts. We have always stepped up to the plate to ensure that our environment is sustainable. After all, our families live here and we take care of our families just like you.