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(Commission Secretary)

Good afternoon members of the Clean Environment Commission panel and ladies and gentlemen of the audience.

My name is Mike "Spurs" Waldner and I stand here today as a representative of the Coolspring Hutterite Colony. Our colony is located 12 miles northeast of the Town of Minnedosa in the Rural Municipality of Minto. Our Colony has 83 members which make up 21 families. Hog production is a core business activity which supports our colony.

We are a 575 sow Farrow-to-Finish hog operation which markets approximately 14,000 hogs annually. 450 of our sows produce hogs that we sell to Maple Leaf Foods in Brandon under a contractual arrangement through the Canadian Quality Assurance Program. The remaining 125 purebred sows are used to produce female breeding stock for Coolspring Colony Farms and 30 family run hog-farms located in Manitoba.

Hog production requires skilled and trained people looking after various aspects of the operation including animal health, welfare, nutrition as well as health and safety. The Coolspring Hog operations is managed and operated by certified Pork Production Technicians, approved by the Assiniboine Community College. We have members who have a Trucker Quality Assurance certificate and/or a H<sub>2</sub>S Hydrogen Sulfide Awareness certificate. And one of our members has received training from McKay GENSTAT Consultants Inc. in the use of Real Time Ultrasound equipment which is used to gather loin and backfat measurements from animals in a safe non-invasive way. We use this technology to help us make better decisions when it comes to selecting animals for breeding stock.

I would now like to paint an economic picture for you about the importance of the hog industry in Manitoba. When the subsidies for the transportation of grain to the ports were rescinded in the 1990's, farmers on the prairies and particularly in Manitoba were most affected. When you combine this with rising input costs and flat commodity prices over the last thirty years there is NO profit to be made in selling crops. While average household incomes have grown several fold in Canada, the agricultural commodity prices have remained stagnant. Is it any wonder that the so-called "family farm" has shifted into livestock production and grown substantially in size just to survive? Our colony has also become more reliant on our hog production to generate revenue to support our families.

## NUTRIENT MANAGEMENT

I believe that one of the reasons we are having these Clean Environment hearings is that there is a lot of concern about the potential impacts of an expanding hog industry on the health of our soil and water in terms of nitrogen and phosphorus levels. To this day, it is not clear to me why the hog industry would be singled out in this review since all aspects of agriculture can generate nutrients. For that matter, so can other industries, humans and nature itself and we can see **the combined effects** from all these other sources in the quality of water bodies like Lake Winnipeg.

But the point I want to make here is that the hog industry is being proactive in the way we manage our manure to reduce nutrient loading on agricultural land. For example, six years ago, Cool Spring Farms consulted with J & R Feeds from Winnipeg to look at ways to reduce phosphorus levels in our manure. By adding a feed additive called PHYTASE into our rations we have been able to reduce phosphorus levels by as much as 30%. PHYTASE is a natural enzyme used to decrease the need for calcium phosphate supplements which has a positive effect on the environment by reducing the volume of manure produced and phosphorus produced.

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

## MANURE MANAGEMENT

It seems odd that the province would place a moratorium on hog expansion

after it has worked so hard to put regulations in place to guide the industry in the way we store and handle our manure. I will use our colony as an example to highlight some of the positive impacts that these regulations have had on our hog production.

Cool Spring Farms has two above ground manure storage tanks which can hold 4 million gallons of manure. This gives us enough capacity to hold the manure for one year between fall applications of manure. We have also reduced the amount of water consumption at our barns and therefore the volume of manure we produce by converting from water nipples to water bowls. By doing this, we save 2 litres of water per hog per day.

We have a Manure Management Plan as required by the Manitoba Livestock Mortalities and Manure Management Regulation under the Environment Act. Our colony has been complying with these regulations and it costs us approximately \$2,000 each year to pay for soil testing and professional services. We have been approved to use 4,273 acres of our own land for manure application.

Liquid manure handling has changed a lot over the last ten years in the hog industry. Instead of surface spreading, we are now injecting the manure to take advantage of its nutrient value, to minimize odours and to reduce the risk of surface runoff after heavy rainfall events. We use a low disturbance, shallow injection method for incorporating manure into the soil.

## MORTALITIES

Under the Manitoba Livestock Mortalities and Manure Management Regulation, livestock operators are required to dispose of mortalities in an environmentally sound way. Here, the hog industry has a few options for handling mortalities. Cool Spring Farms uses a 3 stage composting site located in an area which is not prone to flooding, leaching or surface drainage problems. The composting process breaks down the carcasses quickly and cleanly with no odours and flies and we can use the end product as a source of fertilizer on the colony. Furthermore, we find that composting saves us freight billing costs which are charged for mortality pick-ups.

## LAND USE PLANNING AND APPROVAL

In June 2005, Manitoba passed Bill 33, The Planning Act, which now requires that every planning district board or municipal council prepare and adopt a development plan which must now include a **livestock operation policy**.

This regulatory requirement should increase public confidence in the siting of new hog operations, however, I strongly recommend that the province oversee the development of these policies to ensure that they are fair, not specific to just the hog industry, and that they are based on SCIENCE rather than personal biases.

Currently, the Cool Spring hog farm is located in a sparsely populated area of our municipality. The nearest designated residential area is the Community of Polonia. The western zoning boundary of the community is located approximately 2.5 miles north east of us in the RM of Rosedale. Aside from the dwellings owned by the colony, the nearest occupied dwelling is located 0.9 miles from our barns and manure storage. Our barns and manure storage and composting compound are setback more than 100 metres from property boundaries, road allowances and surface water courses which exceeds the requirements laid out in the regulations.

## GROUND WATER QUALITY

Good quality water is vital to the health of our pigs and reduces the incidence of most health problems like scours. Ground water is an important primary source of water for many hog producers and colonies.

Water testing which is done by Northwest Labs shows that we have a good quality groundwater supply at our colony. It is free from nitrates, bacteria and E-coli that, if present, could be harmful to our animals and our families. Despite its good quality we still chlorinate it at 2 PPM to ensure good health in our barns.

We are required to test the water in our well prior to manure application approvals can be given. When we apply our manure, we maintain adequate setback distances from water wells and surface water courses to avoid leaching. We apply manure at proper agronomic rates and take into consideration things like residual concentrations of nitrogen and phosphorus in the soil, crop nutrient requirements, soil texture and the location of our aquifer. We regularly inspect and maintain our wells to be sure that pollutants can not get in and we sample and test our water for a wide variety of constituents including nitrates, bacteria and E-coli at Northwest Labs in Winnipeg.

## SURFACE WATER QUALITY

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

We mark out our buffer zones and setbacks prior to manure application. We inject manure into the soil at appropriate rates to reduce potential surface runoff into surface water. We do not spread manure on frozen soil or during the winter period so there is no risk of runoff in the spring.

All of this is done in accordance with the Manitoba Livestock Mortalities and Manure Management Regulation - one of the many newer regulations in place to protect the environment. How can ~~the~~we, as pork producers, go wrong?

## SOIL QUALITY

The land at Cool Spring Farms has been classified primarily as Class 2 and 3 with areas of Class 5 and 6 under the Agricultural Capability classification system. Class 2 and 3 soils are productive agricultural soils with mild to moderate limitations for annual crop production. Class 5 & 6 have major to severe limitations for crop production and generally better suited for perennial crops or forages. These ratings and land uses are carefully considered when we apply nutrients and, in some instances, we may not be able to apply manure at all. Soil testing tells us what the residual nitrogen and phosphorus levels are in the soils and we adjust our manure application rates so that the applied nutrients help us to achieve realistic yields in the target crop.

## GROUND WATER SUPPLY

Water is a necessity for hog production and groundwater is an important source of water for many hog production units in Manitoba. Water is required, not only for swine consumption, but it is also used for barn cleaning and manure handling systems.

Our ground water supply comes from a 70 ft deep well in the Polonia Valley Aquifer. We have a Water Rights Licence which allows us to withdraw 68,000 litres per day (or about 15,000 gallons per day). We use approximately 10,000 to 15,000 gallons per day of which 3,000 gallons is required to clean our barn approximately 4 days a week.

We have adopted water conservation practices like the Lou drinker to minimize water loss in our feeder pigs. By monitoring our consumption we have found that we use 2 litres less water per day per pig than the conventional spring water nipple.

## ODOUR

Livestock odours are often viewed as a nuisance by the public and there have been complaints raised about it causing eye and throat irritation, headaches, nausea, and even anxiety and depression. According to the Ottawa Citizen newspaper, which obtained information from Agriculture Canada reports written before 2000, most health complaints come from barn workers. Under the Manitoba Workplace Safety and Health Act, however, employers are required to provide a safe working environment for workers. So, for barn owners, this may include providing masks, good barn ventilation and training to protect barn workers. Working in a barn, however, is not for everyone since some people are more sensitive to odours than others.

Using our colony as an example, we have invested in gas detectors to check H<sub>2</sub>S and ammonia gas levels in our barns. There was a time when these levels were unbearably high for both animals and workers. But we started using a product called Soluzyme and then later on a product called Maxizyme. These helped to reduce ammonia levels from 20 to 30 PPM down to less than 2 PPM. The manure has a lower volume of solids and our slurry seems to be more liquefied making it easier to pump into our pipeline operation and to transfer it to our holding tank and injection equipment.

We also remove the manure from our barn more frequently to reduce the intensity of the odour and we added pit ventilation to remove gas build up. With these better management practices, we have healthier pigs and workers..

We also went to some considerable effort to plant a shelterbelt perimeter around our barn and manure storage to diffuse odours emitted from our barns and manure storage and to improve the appearance of our swine operation.



## DISEASE TRANSMISSION

Disease transmission and control are important issues for the hog industry. We have seen the effects that a disease like BSE can have on the cattle industry and AVIAN flu on the poultry industry. The hog industry and our barn is well aware that disease control is of paramount importance and we go to huge extremes to protect our animals and ourselves.

Cool Spring Farms has been able to retain its High Health Status since it started in 1986 by keeping a strict bio-security protocol for the barn.

1. Workers must “shower in and shower out” of the barn. And workers, who are in contact with other animals or have hauled hogs to the plants, are required to stay out of the barn for at least 24 hours.
2. Visitors are not allowed. No exceptions.
3. Our hog transport truck is disinfected after each use and dried thoroughly before it is used again.
4. We have a quarantine barn for incoming breeding stock and conduct blood tests to check for health problems.
5. We have our own A.I. lab for A.I. collection which eliminates the need to bring in semen from outside AI sources or using outside boars for natural breeding.
6. Mortalities are placed within the composting compound within 24 hours for fly and bird scavenging control.
7. We keep our barn clean by washing and disinfecting it after every pen of hogs goes through.

These biosecurity rules also help to protect the public and the animals by eliminating widespread contact between humans and animals which can prevent the transmission of illnesses between species.

## CLIMATE CHANGE

Climate change has recently become a “hot” topic of discussion - if you’ll pardon the pun. I don’t think we understand it well enough to know what the long term impacts will be on us. Nor do we fully understand the extent to which our human activities are affecting global warming patterns.

Greenhouse gas levels in the atmosphere have increased over the years. Is this a natural phenomenon or is this caused by human activities like burning fossil fuels and burning rain forests? Or both?

And how will climate change affect the way we currently manage manure? Will a few years of drought affect our soil tests and the rate at which we will apply manure on the land? Will a heavy rainfall over a long period of time cause nutrients to leach out of the soil? Will the government do any research in these areas to answer these questions and others related to the way we manage our operations?

That concludes my presentation for this afternoon. Before I step down I would like you to carefully consider the implications of any decision you make regarding the hog industry in Manitoba and this moratorium.

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

Submitted by  
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