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Our Industry is Sustainable in Manitoba!
By Jason McNaughton

Good afternoon, members of the Commission. My name has been stated, though I would like to give you a brief background on who I am and what my position is within this industry. I am the general manager for a livestock nutrition company that provides its services throughout the western Canadian Prairie Provinces. We at Standard Max Pro Nutrition directly employ 16 people here in Manitoba.

I am a permanent resident of this province where I was raised from my youth. I've through my employment been a member of the greater hog industry here in Manitoba for the past twelve years. Although I was raised in rural Manitoba my immediate family were not livestock producers. We as a family left our city home when I was 7 years old and moved onto a section of land in the Garson/Tyndall area of Manitoba. Within 1 and a half miles of our new home there were 2 separate hog facilities and one broiler chicken facility from which new odors (to us) emanated from time to time. As new citizens in this area we were taught by our parents that these odors are the charm of country living. We still as a family believe that these pollutants (as some will refer to them) are far more bearable than the ones we left behind when leaving the city. IE. Vehicle, and industrial emissions, but also noise pollution. To this point my parents now reside on a acreage just north of Grunthal, MB (the most dense livestock are of Manitoba), my sister and her family reside on a acreage near Landmark, MB, and my family and I reside on a similar acreage in the municipality of Ritchot.

My passion for the livestock industry was spawned in my earlier years as I had employment opportunities on farms close to home. When as an adult an opportunity arose to start a permanent career in the hog industry it seemed

like a perfect fit from my upbringing. My family today has only one income and this is thanks to our Manitoba hog industry.

Due to my passion for this industry, I could likely speak all day on how our industry has been early adapters to all measures that improve both the well being of the animals we raise and also to the using of the manure fertilizer we produce. Given your need to hear from many throughout your sessions, I've settle on just a couple of points that are somewhat unique to the focus of our organization within the industry.

Hopefully the points I make to you today will be helpful in your deciding that the hog industry is sustainable in our province and that growth of our industry is still possible as all citizens and industries in our region make sure that our environment returns to a healthy state.

As an industry our goal is and must be to responsibly use the by product resources that we produce, such as manure fertilizer and it's chemical make up, in way that poses no threat to the environment.

From this I would like to present to you from a nutrient management perspective, a few ways in which our industry and especially our hog producers are changing the way we operate in order to meet this goal. Specifically I will discuss strategies that we and our clients have and will continue to adopt which are reducing phosphorus in the manure fertilizer itself.

The management of phosphorus must first begin at its starting point which is its introduction into the cycle. This happens through the formulation of our swine diets which must meet the requirements of the animal in order for it to grow and flourish.

You've already heard some talk of the phytase enzyme which significantly reduces the input need for hard rock phosphorus in our diets. I'm not sure how technical your understanding of this ingredient is, but not being a nutritionist myself I've brought and will leave for your review a technical data package on this product which will possibly enhance your understanding of phytase.

Our company employs 3 PhD and 2 Masters Degree nutritionist that have been made available to your commission should you have any questions that need comment from that perspective.

Your commission raised a question at the Winnipeg session as to what percentage of our industry in Manitoba is utilizing the phytase technology. I wasn't certain that you were satisfied that this question was answered, so this will be the first thing I would like to address. Now unfortunately, we do not formulate for the entire industry so I won't completely answer this question. But you may have a much better sense once other members of the feed community have presented at these sessions. In answering your question regarding phytase I must also tell you that our formulation team uses two different products to reduce phosphorus outputs. The first being phytase itself and the second being a product called Maxizyme. I would like to answer your question by illustrating what percentage of our total production incorporates the use of these technologies.

We at Standard Max Pro Nutrition feed mostly farrow to finish operations. We have a strong market share with the Hutterite Colony sector of the industry and also feed a sizable amount to privately owned facilities in Manitoba. If you take all the farms where our consultants formulate exclusively, they will represent 460,000 hogs marketed annually here in Manitoba.

Through some analysis I derived at an estimate, that 70 % of these 460,000 animals are fed an enzyme product that reduces phosphorus in the manure fertilizer. I also reviewed our usage of both of these products comparing 2006 and 2007 projected and the usages through our formulation of these enzyme products has increased by 84% for phytase and 85% for Maxizyme. Please note that this growth demonstrates that our industry is moving forward voluntarily to reduce phosphorus in manure fertilizer.

Although this process has maybe just begun, I can expect that 95% of our diets will contain enzymes to reduce phosphorus within the next two years. The momentum among producers to utilize these products has begun. The research is new and is being proven at the farm level as we speak. This is a very important point because all of us take time to adapt to new technology. Just because cell phones were invented doesn't mean everyone will have one tomorrow, although our industry does realize the need to incorporate these technologies quickly.

The next point I would like to make is on our focus of nutrient utilization as it pertains to feed conversion and feed wastage as these factors can and have contributed to the amount of phosphorus left in our manure fertilizer.

First off I will speak on feed conversion. We that formulate diets for the swine industry have incorporated again the use of different enzymes than previously mentioned that specifically hone in on certain feed stuffs. These enzymes increase the digestibility for those feedstuffs and allow improved utilization within the animal. The better the animal utilizes any nutrient- the less feed it will need to reach its market weight, thus reducing the amount of manure fertilizer itself. The different enzymes that we incorporate in our diets include xylanase (wheat), Glucanase, and cellulase. All of which serve a different function with different feed stuffs, but all respond in a way to improve digestibility for the animal and thus reduce the feed required by the animal. These technologies- some of which weren't available 12 years ago when I entered this industry, but all of which were somewhat fringe at that point, are common place in all our current rations.

Another technique that lends itself to greater feed utilization is the balancing of particle size on our on-farm feed mills. This serves two functions- the first is to provide the animal with crushed feedstuffs which increases surface area of the ingredient thus allowing greater breakdown of nutrients in the GI tract of the animal. An improper particle size can move through the animal too quickly before its nutrients can be properly absorbed if too large. Too small a particle can remain in the animal too long potentially causing other ailments. A proper particle size will enhance feed utilization significantly. These are reasons why our current feed conversion rates are significantly lower than in the past and continuing to improve. Our company works closely with the on-farm feed mills to ensure their grind is optimal by traveling with a feed sample shaker which analyses particle size at the farm.

Next we focus on feed wastage, which is raw unused feed matter that enters the manure pit without going through the animal. Again this has changed so much with new feeder design that supplies a constant and appropriate flow of feed to the animals with special designed features that will not allow the animal to empty the feeder as is roots around in the feed. Most of these well designed modern day feeders were invented by a hog producer. One of which is a good friend of mine, who now makes his living here in Manitoba manufacturing and marketing his design.

In concluding, I hope you serving on this commission can see that the hog industry is progressive in finding and utilizing technologies and techniques that will improve the make up of the fertilizer we produce and that our

management of this fertilizer does not jeopardize the health of our environment. I would like to leave you with a question on my mind that I believe I know the answers too. Would there be an initiative started to improve the environmental health of Lake Winnipeg if there was no hog industry in Manitoba?

Thank you.

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