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Phospholutions, Inc. providing a Phosphorus Management Technology for delivering Phosphorus Fertilizer more Efficiently to the Soil, Loading Nutrients into Aquatic Ecosystems and Environmental Remediation

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CEOCFO: *Mr. Swisher, what is the concept behind Phospholutions?*

Mr. Swisher: We have a patented technology to deliver phosphorus fertilizer more efficiently to the soil. Our technology has been developing into capturing phosphorus from areas where it is being discharged into the environment with the ultimate goal of recycling that waste back into agricultural production as fertilizer.

CEOCFO: *What is wrong with the way phosphorus is used today?*

Mr. Swisher: There are a few key issues. The first is that phosphorus is a finite resource. Phosphorus is mined to similar to petroleum where it is mined from finite reserves that have built up over millions of years.

The second issue is that phosphorus fertilizer can be very inefficient. Research estimates that more than 60% of the phosphorus we apply as fertilizer is never used by the plant. The third issue is that when phosphorus washes away into the environment, it causes severe and large-scale water quality issues that can be seen around the globe.

CEOCFO: *Is there anything comparable to phosphorus in fertilizer today and is it necessary?*

Mr. Swisher: Phosphorus is absolutely necessary. It is the second largest nutrient that is applied for food production. It is the second largest input required to grow a plant. All living things require substantial amounts of phosphorus.

CEOCFO: *How are you going to get phosphorus from waste?*

Mr. Swisher: We use an adsorbent where we selectively pull phosphorus from places where we do not want it to be and then we use that phosphorus that is bound to the adsorbent to redeliver it back to the field in an enhanced efficiency form.

CEOCFO: *How intricate, costly and hard is it to set up?*

Mr. Swisher: Our goal is to be able to sell a more efficient source of phosphorus that was produced from waste at a competitive price point compared to commodity sources today. The way we do that is we sell the adsorbent for use as a remediation tool for applications discharging phosphorus into the environment. The applications where phosphorus effluent is an issue use the adsorbent to clean up their issue and then resell the by-product once saturated with phosphorus as fertilizer. It is a more cost effective treatment option because of the revenue stream generated on the back end.

CEOCFO: Do people using phosphorus now understand that a lot of it is not really getting through or is there some education that needs to be done along with introducing what you would like to do?

Mr. Swisher: I think the need for education stems from two levels. There is the farmer and the consumer. The general consumer is very aware of the end issues associated with phosphorus solution and are not always aware of the fact that it is phosphorus causing the issue. This year specifically, in the US, Florida was hit with very large algae blooms that occurred on both coasts and those are stimulated by phosphorus loads entering into the waterway. The general public may understand the algal blooms are devastating the water bodies, but not understand the cause of the algae growth.

The farmer is very aware of this because they are running a business and that business depends on reducing operating costs specifically from chemical inputs. Fertilizer is a pretty big input and phosphorus in particular being the second largest; we do apply quite a bit of phosphorus in the US. The big figures that we like to talk about here and why our solution is so important is that we apply about four billion dollars worth of phosphorus every year in the US as fertilizer and we as a country spend over five billion dollars cleaning the effects that phosphorus has on our waterways.

CEOCFO: Where are you today in development and commercialization?

Mr. Swisher: We are an early stage startup. We are in growth phase now. We do have one commercial product line on the market today and a second one that is being launched this summer. Our commercial timeline to get to this large scale initiative of capturing and recycling is about two years out from being fully launched throughout the entire US. We recently made a closing on our seed round and we are in the process of ramping up our team as well as our commercial product lines here in the US.

“The big figures that we like to talk about here and why our solution is so important is that we apply about four billion dollars worth of phosphorus every year in the US as fertilizer and we as a country spend over five billion dollars cleaning the effects that phosphorus has on our waterways.”- Hunter Swisher

CEOCFO: What is available today and what will be different after that?

Mr. Swisher: Right now we are tackling the first half of the problem, which is trying to increase phosphorus efficiency from a fertilizer perspective. Our product lines to date are about trying to make what we do apply as fertilizer stay where we apply it until it is utilized by the plant so it does not end up in the environment. Solving the back half of the problem is being able to produce an enhanced efficiency fertilizer through capturing and recycling phosphorus, which is where our technology will be in the upcoming years.

CEOCFO: How do you gain attention from both groups that you are looking to interact with, the farmers and the waste producers?

Mr. Swisher: I think the folks that are polluting phosphorus are very well aware of the fact that they are. There are some hefty fines for discharging phosphorus into the environment and these folks are aware that they are not compliant. To get in front of them and get their attention, we do leverage some very large chemical corporations and other companies here in the US through partnerships and we leverage our sales channels to get in the door with these folks. Many of these projects are government-funded projects. The farmer is very similar. The farming sales channel is very much owned by the largest distribution companies in the marketplace and they are the ones that have the relationship with the farmer and the trust of the farmer that these projects and technologies are going to provide an ROI for them.

CEOCFO: Are there competing ideas on how to address the phosphorus problem?

Mr. Swisher: This idea of capturing and recycling phosphorus in the phosphorus community is something that has been around for over a decade. There is one company in particular that is focused on doing a very similar technique to ours, but it is very specific to where it can be implemented, so I think the competitive advantage for our technology is the ability to be implemented in a wide range of applications spanning from agricultural runoff all the way to industrial effluent, manure, and human waste. The group that is our biggest competitor is very focused on human waste.

CEOCFO: With such large potential as far as the waste side, how do you decide where to focus?

Mr. Swisher: As a startup company, that is the number one question we face on a daily basis and I think our focus has been split between trying to scale and take advantage of the market opportunity directly in front of us in some of these high value markets that we work with today with our current product lines, but also balancing between, we have a mission we are trying to work towards and we need to chip away at some of those R&D and product development efforts to get there. We balance between high value markets today generating revenue today and achieving our long-term mission tomorrow.

CEOCFO: *What surprised you as you have gone from the concept to where you are now?*

Mr. Swisher: I would say what surprised me is the receptiveness of the farmer, being conscious and aware of the problem, and that they naturally are environmental stewards. I think that farmers and a lot of the other clients that we work with typically get a bad rap from the public's eye as being polluters and they are really not. They are the ones protecting this land and make their living off their land. I think what we have been surprised by is how willing these folks are to go above and beyond to implement solutions even if it does cost a little extra, for the greater good.

CEOCFO: *How far will the financing take you?*

Mr. Swisher: The financing is projected to take us about eighteen months until we go out and raise a much larger series A round.

CEOCFO: *What is the interest from the investment community?*

Mr. Swisher: What makes us venture worthy or venture backed is our long-term mission and large market opportunity on a global scale. This phosphorus problem is a global problem and it is a very large one, so the market opportunity lies in unlocking some of the potential in our technology that maybe has not been unlocked yet today.

Where we are commercially today is not indicative of the potential of our company and that is the thesis behind some of these investment opportunities. However, if we unlock this full-scale potential, there is a huge market here and a huge potential for Phospholutions to make a big impact on the world.

CEOCFO: *Why pay attention to Phospholutions?*

Mr. Swisher: You should pay attention because the world is changing like the way that we do things on a global scale and Phospholutions represents a unique perspective as to how a very old school, conventional industry can change through innovation. We are trying to shift an industry mind set from focusing on tonnage to focusing more on producing value. I think we represent a shift across many industries, not just agriculture.

CEOCFO: *Anything people might miss when they look at Phospholutions?*

Mr. Swisher: We are a very young motivated team. We have a lot of potential and I think it is something people not familiar with the problem we are trying to solve overlook.