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Derk Maat, CEO of SciCorp Perseveres to See His Long-Term Vision Materialize as SciCorp has Developed Sustainable Powerful Carbon Footprint Reducing Solutions For Wastewater Industry

Derk Maat
CEO

SCICORP INTERNATIONAL CORP

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CEOCFO: ***Mr. Maat, what was the original vision you had when you took on SciCorp International Corp? What is your focus right now?***

Mr. Maat: The original vision I had when I took on SciCorp goes back to when I was a teenager in university. I grew up in a northern town in Northwestern Ontario, on the shores of Lake Superior. I actually grew up on a river that fed into the lake. Where I lived, there was no industry, and as a teenager we would catch fish every day and bring it home to eat, we thought that life was normal for everyone. At that time, we had no television, which dates me of course, according to my age. However, I knew I wanted to be an engineer, and my dad had run a construction company in the landscape sector. I went to university and my first job was working for Public Works Canada, taking soundings in the river on which I had grown up, two miles upstream. However, at the mouth of the river there was a huge pulp and paper mill, and they were dumping the bark and residue from the pulping process into the river, causing a buildup of residue, and the federal government was doing the company a favor by dredging out the river periodically, to allow ocean going ships to come in and pick up the paper products. Needless to say, while we were taking depth measurements with the lead weight and a line, to determine how much sludge was in the bottom, my hands would come out with a rash, and I would see dead fish floating around. Then when I looked up at the mill, an inner voice said to me, "I want you to be part of the solution, not the problem." Every young engineer wanted to work for the pulp and paper industry, because they paid very well.

I kept that vision in my head, and transferred to a larger university, the University of Waterloo, which is Canadas premier engineering school, and became a wastewater sanitary engineer. I got a job as a young graduate with an engineering/science consulting group, and over the years I designed and built many wastewater plants, and actually expanded the scope of the company's work into the pulp and paper sector, and we started designing wastewater treatments for the pulp and paper industry, but using technology from Europe, because we did not have appropriate technology in Canada at that time. That gave me my vision as a sanitary wastewater engineer, doing both domestic wastewater and industrial wastewater treatment. I had a good career in that industry, and ended up working for Canadas largest engineer firm, called SNC-Lavalin today. I left them in 1995 to start my own engineering firm, Maat Environmental Engineering, basically designing wastewater plants, and also cleaning up contaminated sites with the same sort of expertise I had gained in the wastewater industry and came across this company that had a product that would enhance

wastewater treatment with special additives. I immediately saw the benefit of that because I was an expert in wastewater treatment, and I started developing applications for the founder of that company.

In 2005, I became part owner, and in 2009, took over the company completely. It was a product technology company, but it did not have a strong engineering base. Therefore, I put a lot of engineering into the products that they had at the time, which were used in residential septic tanks and small wastewater systems. Today, we have expanded the use of the products into very large domestic wastewater plants, as well as across a complete sector of industrial wastewater treatment plants. The focus that we have today, is to add this additive to the wastewater treatment plants, whether it is domestic wastewater treatment, or industrial wastewater treatment, where we actually reduce the odors produced by a plant, we reduce the energy use of the facility, and we reduce the amount of sludge that is produced by the facility, we improve the treatment capacity of the plant, and we improve the quality of the effluent, all with one single product.

Jesse Garant Metrology Center

CEOCFO: ***Is it the same for residential and for a big plant, or would it be different strengths of the product?***
Mr. Maat: It is the same product, but the dosage rate changes for domestic applications. It can be used in a latrine toilet, it can be used in a septic tank system, it can be used in a lagoon or a natural lake, or river body that is polluted, or it can be used in a large industrial wastewater treatment of domestic wastewater treatment plant. It is the same product, same affects, and benefits, and we have now developed the capacity to discuss with the operating people of these plants as to what their challenges are. We identify the challenges, we identify the solutions for those challenges, and we show that we can be successful in reducing the carbon footprint of the facility.

"The vision we have is that we can change the way sanitation is being practiced and improve the performance and reduce the carbon footprint of wastewater treatment, whether you are looking at a pit latrine in a village in Africa, or a highly sophisticated wastewater plant." Derk Maat

We have also developed a positive cost benefit analysis, which includes assessing the cost of our product verses the savings that can be realized. The net result is that we are reducing the carbon footprint of the facility, which is now becoming a goal of many operational groups. We are actually in discussions with large wastewater utilities, in both the United States and Europe, and very large domestic wastewater treatment plants. We have case histories to back up our claims in almost every sector where we are active.

CEOCFO: ***Your site shows, "A BIOLOGIC approach." What can you tell us about what you have developed?***
Mr. Maat: Our product is derived from certain plant species. We mix together the extracts from these plant species, and then we add a few other compounds as well. What we have developed is very unique micronutrient vitamin-based

product. It is not a mineral supplement, it is not a bacterial consortium, it is not an enzyme, but it is vitamins and amino acids, which trigger the bacteria to operate at a much higher rate. In a typical wastewater plant, when we add our product, we are not asking the plant to add anymore tanks, pipes, or pumps to increase capacity or performance.

All they are doing is activating the engine of that wastewater facility, which is the biological Floc. We are speeding up the micro bacterial consortiums that are in that wastewater, by a factor of 2 to 3. At the same time, we inhibit the odor producing bacteria. Therefore, for plants that are faced with odor complaints, and odor impacts on the surrounding communities, we solve their odor challenges. For plants that are faced with over capacity issues, poor effluent quality issues, fines from the regulatory agencies, we solve these problems without capital expenditure, and without having to change their basic technology.

Nano Diagnostics/NanoDX

CEOCFO: ***When you are speaking with the right person at an organization, do they understand what the approach is, why it works, and that they should be using it? Is there something you can particularly point to, gets the lightbulb going in someone's head?***
Mr. Maat: That is a very good question. Because we are wastewater engineers, and sanitary engineers, we speak the language of the operating engineers at a wastewater plant. Therefore, in our discussions, we can identify their challenges and we can provide technical solutions to their challenges which they understand with our SR2 biologic product.

The biggest challenge we had in the past was for the wastewater industry to be convinced to believe our story. We have now developed case histories, as I mentioned earlier, across major sectors, where we can point to a case history or a reference and give them the contact information of that project reference, and the users of our technology will affirm and confirm the claims that we make.

We also provide performance guarantees. We say to folks that once we have analyzed their plants, their challenges and their issues, if you use our technology with this recommended approach, we will guarantee that we will take the odor out of your plant and stop the odor complaints. That speaks volumes to management and procurement, and we typically end up starting the projects with a 3-month trial, and we prove our claim in that trial, and then we enter into long-term contracts.

CEOCFO: ***What is involved in using your process? Are you adding to the wastewater repeatedly? How does it get from you into the water? What is the process?***
Mr. Maat: Our product is a very concentrated liquid product. We ship it in large totes of 265 gallons in tote, and it needs to be added on a daily basis to the wastewater flow. To give you an idea of the volume of our product required; one gallon of our product in domestic wastewater, will treat one million gallons of sewage. The product use is not very high.

For every million treated, you need to add one gallon of our product. In some domestic cases, where there is some industrial waste in the wastewater flow, it might go to two gallons per million gallons treated.

For high strength industrial waste, it may go up to ten gallons per million gallons of flow. Therefore, it is dependent on the strength or the degree of contamination in the wastewater. The product is consumable, and when we add the product to the wastewater, it is 100% biodegradable. You cannot find any trace of our product in the effluent once it is treated.

CEOCFO: ***Is cost a factor for your customers?***
Mr. Maat: Cost is always a factor, and as the cost of energy goes up, and the cost of waste processing goes up, our product becomes more and more affordable. The cost of traditional chemicals is going up, as we are seeing today with the inflation of 20/30% percent in chemical additives. Our product is a plant extract, it is not a chemical, as a result we can maintain the price of our product without these dramatic increases that we are seeing in the supply chain, today. Our ingredients for our product are all sourced in North America.

CEOCFO: ***Are there any supply chain issues, manufacturing issues or delivery issues?***
Mr. Maat: No. We have no supply chain issues, and we have warehouses strategically located throughout North America, so that clients can have product delivered within 5 business days.

CEOCFO: ***How do you reach out to potential customers? It seems like a limitless amount of places your approach!***
Mr. Maat: That's the biggest challenge that we are now overcoming. We do online advertising, we do social media advertising, we do LinkedIn advertising, we do a large number of trade shows and conferences, we speak at conferences. In fact, we will be speaking at a major pulp and paper conference in Chile, and we will be presenting our results at a Chilean pulp and paper mill, and that of course, will be presented in Spanish. We have developed an international capacity and capability to work with engineers in various languages and countries. We are currently selling our product in 25 countries around the world.

The vision we have is that we can change the way sanitation is being practiced and improve the performance and reduce the carbon footprint of wastewater treatment, whether you are looking at a pit latrine in a village in Africa, or a highly sophisticated wastewater plant in industries that are located all around the world. It can also be used in septic tanks very effectively. A residential septic tank, using 100 mils of our product once a month down the toilet, will completely transform the performance of the septic tank and it's drain field, and 25% of America is still connected to septic tanks and drain fields. Therefore, there is huge potential at both the residential consumer level, both in North American and around the world, and of course in the industrial sector.

CEOCFO: ***Are you selling to residential consumers now, or is that a market that you have yet to work on?***
Mr. Maat: We are selling to consumers via several small distributors. We sell on Amazon. We also sell a product that will take away the odor in your garbage can. It is the same product. When you spray your garbage can, or your compost can, or your food waste bin, it will stop the odor being produced, and once you stop the odor you stop the flies.

CEOCFO: ***What has been the response from the residential arena?***
Mr. Maat: The residential folks that use our product become repeat buyers. The biggest challenge is to get the information into consumer hands.

CEOCFO: ***Are you seeking partners, funding, investment, or distributors worldwide? What is the day-to-day business side?***
Mr. Maat: The business side is very simple. We grow organically. We do not need outside investors to grow. From a business perspective, we have agents and distributors. Agents will sell on a commission basis with us, and distributors will buy our product and resell it in their local areas. Therefore, we opted with both models. We support all of our agents and distributors with technical support. That is one of the things that differentiates in the marketplace. There are many companies that are selling commodity products. We sell a technology, and our technology base is our liquid additive and our technical expertise. We help the clients optimize the use of our product, and we will also help them optimize the performance of their wastewater plant, with other issues they may be facing.

Our engineers have a lot of experience in wastewater treatment, so we will provide corrective action, and audits via our engineering firm for wastewater plants, so that they can optimize the performance of the equipment they have, with the use of our product. That technical support for product use and application is provided at no cost and is included in our product purchasing. For example, we will have a weekly Zoom call with a large client, to optimize the use of the product, and help them trouble shoot their own treatment facilities, looking at the daily or the weekly data that they produce, and we provide technical comments.

CEOCFO: ***How do you deal with some of the frustration, knowing that you have something that really is a game changer, and good for the businesses, but more importantly, may be good for the world, and it is so hard to get enough people, more and more people, to pay attention?***
Mr. Maat: We deal with the frustration with perseverance and longevity. In my company, my sons are now working with me, looking after the marketing and the technical side of things, and the financial performance of the company, so we have a long-term vision. In the last three to five years, we have seen a 300% growth in our company revenues, and each year we are looking at a 50% or more growth as we speak.

I am past normal retirement age, but still very active in the company, because we all have a passion for the product and the technology that we have produced. We entered what is known as a Shark Tank or Dragons Den competition, where we presented our technology for consideration, to the Canadian government and the water association out in the UK. We were selected as a finalist among 6 other companies. We presented out technology to the UK wastewater industry, and we won the competition!

That immediately means that those utilities see us with a credible solution, and with government support, we now have credibility in the marketplace, and our Canadian government, as most governments do, helps emerging companies within their country, to export and sell products that benefit the environment around the world. We are NOW seeing incredible interest in our product and our technologies.