Absorbent Products Ltd.

Turning Prehistoric Mineral Deposits into the Agro-industry's Future

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Diatomaceous earth isn’t just for kitty litter anymore, which is exactly what Absorbent Products Ltd. (APL) has proved in its 20-year history. APL is more than just Canada's only producer of diatomaceous earth; it is one of only two producers of bentonite as well. The Kamloops-based company has found agricultural and industrial applications for both diatomaceous earth and bentonite that outperform the competition in a large variety of uses from cat litter to industrial absorbents for retail, agricultural and industrial markets.

The company is both privately held and vertically integrated, giving it the ability to be proactive in a highly competitive market. "We are the only company in North America that owns mines capable of producing lumping and conventional cat litter. This gives us better control over the quality of our end products. And we are always developing and pursuing new applications for these products," explains Peter Ayleen, president of APL.

“We are fortunate to be able to design much of our packaging in-house, which helps bring products to market sooner," Ayleen continues. Diatomaceous earth, the fossilized exoskeleton remains of prehistoric algae, as well as montmorillonite has been sold as “Red Lake Earth” for use in agriculture for many years. “There was an article recently published in Poultry Science based on a study completed at the University of British Columbia. The study found that using Red Lake Earth increased the profitability of organic egg layers by six cents per hen, per day for one species and three cents for another species. This would mean additional profitability of up to $600 per day for an organic egg layer producer with 10,000 birds. These are phenomenal results,” says Aylen.

The unique properties of Red Lake Earth are based on the deposit's combination of diatomaceous earth and calcium rich deposits of volcanic ash. APL then develops different products to target the material's specific properties. "Some other uses for our products include water retention aids, odour control additives, organic pest control products that are registered for insect control with the Canadian government and anti-caking aids.”

Currently, APL offers 15 different formulations for industrial, agricultural and house pet applications. APL may be best known for its pet products, but the company has always catered to industrial and agricultural markets. In recent years, new research has led the company to develop more products specifically targeting these markets to provide environmentally conscious and non-toxic solutions.

The company may have made a name for itself by advancing cat litter formulations, but in retrospect, APL might never
have transpired at all. “I was first introduced to the company when I was working in corporate finance in Calgary. There was great interest in the company, but investors were hesitant because there was nobody to run it, and here I am,” laughs Aylen. Aylen then took the helm, arranged for the financing and construction and has since led the charge towards diversification, encouraged by the minerals’ comparatively simple extraction and wide variety of applications.

**Environmentally Sensitive Production**

Unlike other minerals, which require deep extraction processes that are highly disruptive to the ecosystem, APL’s mines use top-of-the-line technology and equipment to do as little damage as possible. The company eventually will convert the mine site to grazing land. As of 2010, the reclamation efforts were ahead of schedule. The company has made a conscious effort to reduce its consumption of natural gas by 10 percent and electricity by six percent over 2002 levels, while still using 98 percent of all the material transported from the mine site.

The health of livestock determines the health of a livestock owners’ livelihood, so APL develops products to reduce stress and improve the health of livestock by exploiting the minerals’ porosity. Barn Fresh was formulated specifically for odour and pest control and can absorb its own weight in moisture. The product neutralizes ammonia that in turn reduces stress levels in animals and encourages weight gain. Barn Fresh is added to bedding in order to reduce moisture solid and liquid waste, reducing the need to replace bedding frequently and saving time.

**Worth 130 Percent of Its Weight in Gold**

The minerals’ ability to absorb up to 130 percent of its own weight in moisture also makes it a great fit for industrial applications without the environmental concern of traditional products. APL developed a line of granular absorbents under the Can Dry, All Purpose and Supreme, Zorb Plus and EazyZorb Sprinkles to soak up solvents, alcohols, coolants, oils and paints. Since these have been formulated with natural minerals, industrial customers avoid the use of one harsh chemical to clean up another, limiting the exposure to harmful and often carcinogenic chemicals.

“We have worked very hard over the years to develop a line of products, expanding by distributing related products,” explains Aylen. To date, APL represents three different products to combat oil and petrochemical spills. EazyZorb mats have been specifically developed with a strong barrier to withstand harsh chemicals like battery acid, solvents and bleach. This mat can even absorb up to 1.6 liters of liquid, ensuring that the flooring beneath the mat is safe. The SPC absorbent pads come in different sizes and shapes to offer up to 20-times their weight in absorbency and are specifically formulated for manufacturing and industrial settings.

A third product is Oil Gator, which is an organic oil absorption solution. The products are flexible and available to target oil-based spills and solvents. APL even offers...
bundled products as emergency kits complete with gloves, hazardous waste bags and enough pads to make easy work of up to five gallons of spilled material. APL also offers Can Blast, a sandblasting medium that is crystalline silica free.

In the past two years alone Aylen and the APL team’s efforts have earned the company five awards to recognize its achievements: Mining and Sustainability, Top 25 Exporter, Business and Manufacturer of the Year and Resource Company of the Year awarded by local and provincial organizations.

In the coming years Aylen and the APL team will continue to search for new markets for its diatomaceous clay and bentonite that have made it popular across North America. Equipment at the mine is constantly being upgraded and the research and development teams are tirelessly working to improve existing products and develop new ones for niche markets.

Regardless of the company’s plans to celebrate, Absorbent Products Ltd. will have no trouble providing customers with the natural, eco-friendly, pet friendly and wallet friendly products that make celebrating a 20-year anniversary meaningful.