



Feature No. 15: Lótus Química Ambiental

Brazil-based *Lótus Química Ambiental* (Lotus Environmental Chemistry) has developed an innovative means to preserve the world's vital water resources through chemistry. Marcos Gugliotti, a chemical engineer with 11 years of research in monomolecular films, founded LQA with the aim of finding a viable and lucrative solution to protect the world's water supply. Lótus Química Ambiental is located and was cultivated in the Technology-Based Business Incubator Center at the University of São Paulo. Its product is a powder that forms an ultra fine microfilm on the surface of water reservoirs, reducing water evaporation by up to 50-percent. This is a much needed service in Brazil, where harsh dry seasons make water conservation essential.



The nontoxic and patented product of Lótus Química Ambiental has received interest from around the globe. Gugliotti is optimistic to the far reaching possibilities his invention can have on global resources and environmental protection. His product is being looked at for potential use by those in the agricultural sector to reduce soil water evaporation, the aquaculture sector, municipal water



supply managers, as well as governing entities of water reservoirs and hydroelectric operations. Lótus Química Ambiental plans to focus on further research and development to test the water evaporation reducer for these other uses.

Gugliotti recognizes that many potential clients may question the sustainability of adding chemicals to a water supply. To forge credibility and prove that chemistry can be used in harmony with nature, Gugliotti has presented his research at conferences and meetings both in the science and environmental resource management communities. He also has certification from the Brazilian International Institute of Ecology that LQA's powder is inert, non-toxic and does not impede the normal function or activities of water reservoirs.

Lótus Química Ambiental initially received start up funding from the Brazilian financial agency FAPESP, which is focused on investing in domestic scientific innovation for development. The company is currently valued at US\$3.5 million and its growth potential is excellent. In Brazil alone, the potential market for Lótus' water evaporation retardant, based upon available water reservoirs, is estimated at US\$6 billion a year. Judging from the interest Gugliotti has received from potential clients, he estimates US\$500,000 in sales revenues the first year of production, growing to US\$5.5 million in sales revenues after six years of operation. Gugliotti seeks US\$620,000 in investments for Lótus Química Ambiental in order to cover operational costs and to maintain a laboratory for further research and development of new uses and variations of the product.

For more information about Lótus Química Ambiental, contact Dr. Gugliotti at lotusqa@uol.com.br or see the company's profile at www.new-ventures.org.