

Composting in South America

Esteban Monge has become a very good friend of mine. As an undergraduate student nearly 6 years ago, Esteban contacted me by telephone, greatly concerned because he had recently failed his Senior Project, “Composting - a Solution to Organic Waste Management in Puerto Rico”. His instructor, it turns out, didn’t believe that composting on a large scale was possible without severe environmental and community impacts. I reassure Esteban that it most certainly was possible, and in fact was common practice in Washington State.

I provided a number of reference books and case studies and I suggested that he ask his professor to visit our web site, O₂Compost.com. Esteban also visited me in Seattle and together we toured 12 municipal composting facilities that all utilize aeration as a means of controlling the process. Three months later, Esteban called to let me know that he had received an A+ on his project and had graduated with a bachelor’s degree in Environmental Science.

I have never met anyone more enthusiastic about composting than Esteban. Armed with confidence and his new college degree, he set out to begin composting on a large scale in his home town of Guaynaba, Puerto Rico. Unfortunately, the local regulators didn’t agree with his ideas and set up road block after road block that prevented him from taking action for over four years. Entirely frustrated, Esteban moved to live with friends in Columbia, South America where he hoped to pursue his dream. It took nearly two years of diligent effort to convince local authorities to let him set up a small scale aerated compost system as a demonstration project.

The aerated compost system that he constructed consisted of eight bins, each with a different mix of feedstock materials and aerated by a single blower. As shown in the following pictures, the bins were constructed using bamboo posts and rough cut scrap lumber. The base was lined with a plastic tarp to protect ground water, and he constructed a temporary fence to provide visual security from vandals.

When he started up his system, pile temperatures quickly increased to well over the minimum threshold for pathogen destruction and everyone was amazed that his system did not produce any offensive odors – none. After 60 days of composting, laboratory test results demonstrated that he had produced an excellent compost product. Today, Esteban is a leading authority on aerated composting in South America and has begun teaching classes to solid waste managers in the region.

