

Technology Example 3.2 (B)



Exploris Museum
Raleigh, North Carolina

Highlighted Technology: The Living Machine

Owner/Contact: County of Wake, Facilities Design & Construction
Telephone: (919) 856-6356

Architect: Clearscapes, P.A. and Esherick, Homsey, Dodge & Davis
Associated Architects

Contractor: MLB Industries

Technical Strategies:

The living machine at the Exploris Museum is a natural wastewater treatment plant on site. Designed by Living Technologies of Burlington, Vermont, the system uses natural plant and animal life to cleanse wastewater from the public restrooms in the museum.

Through a series of tanks, algae and plant life do the initial breaking down of the waste components. The effluent is sent through a marsh where additional plant life further cleans the water. A UV filter is the next component of the system, and the water is then pumped into an open pond where fish complete the process. The resulting water is clean enough from this system to be recycled as irrigation for plants throughout the courtyards at the museum.

If there were additional space on the site for a larger system, this process would be capable of cleaning the wastewater to a potable condition. The Wake County Health Department has been very enthusiastic regarding this experimental site and the demonstration it can present of alternative ways of cleaning wastewater and recycling the end product.

Water