

Mission Accomplished – East Brother Septic Tank Pumpout May 11, 2007

Almost three years ago, East Brother Light Station, Inc., the non-profit corporation that operates [East Brother Light Station](#), completed a \$100,000 sewage treatment system funded by a grant from the [State Water Resources Control Board](#) through proposition 40. The system uses an intermittent sand filter, which is a technology similar to a rural septic tank system but has a sophisticated sand filter instead of an underground leach field. The final effluent is subjected to ultraviolet light to kill any remaining coliform bacteria before discharging into San Francisco Bay.



Loading the vacuum truck
onto the landing craft at
Marina bay

Like a septic tank system, the sand filter tanks have to be pumped out every few years. The time had come for a pump out at East Brother, but it was not a matter of simply calling the local septic tank service.



Approaching East Brother
Island

First of all, we had to find a way to get a “vactor truck” to East Brother Island. These trucks are commonly known as “vactor trucks,” which refers to a specific brand. They are used to clean out sewers and storm sewers and then transport the waste to a suitable treatment facility. We chartered an LCM-6 landing craft from [Parker Diving Service](#) in Sausalito. Then we contacted Veolia, the contract operator of the Richmond Wastewater Treatment Plant and collection system. Veolia arranged for one of their subcontractors, [NRC Environmental Services](#) to provide a truck.



Landing craft tied at the East Brother Pier

The truck was loaded onto the landing craft at about 11:30 AM on May 11 from the Marina Bay launch ramp, and arrived at East Brother about 12:30 PM. Although the truck was equipped with 320 feet of 2-inch diameter hose, it was about 80 feet short. Luckily, NRC Environmental Services had a crew working at Point Molate for the Navy cleaning out a few remaining underground storage tanks. Additional hose was delivered within a half hour to Point San Pablo Yacht Harbor, where it was transported to the island by the island boat by Captain (and Lighthouse Keeper) Elan Stewart.



Additional hose being delivered from Point Molate

By 2:00 PM the pumping operation began. The original sand filter construction contractor, John Campoy was on had to open the tank hatches and temporarily remove the pumps.



The pumping operation begins.

The pumping operation continued for another three hours until approximately 2,500 gallons of liquid and semi-solid waste weighing about 10 tons was removed from the sand filter tanks.



East Brother guests arrive at 4:00 PM and have to scramble over the landing craft to disembark at East Brother pier. Keeper Katie Stewart helps guest aboard.

Our profuse thanks go to [Veolia](#), particularly Ryan Johnson, Richmond Collection System/CIP Manager, for making this possible and to the crew from NRC Environmental and Parker Diving Service for carrying out their end of the operation.

It turns out the subcontractor originally engaged by Veolia to provide a vacuum truck for the operation bailed out only yesterday, and Ryan put together plan B in less than 24 hours.