



SAFE WATER INTERNATIONAL

La Cienega Slow-Sand Filter and UV Lamp Installation June 28, 2006.

Source water at La Cienega tested for moderate levels of fecal coliform and very high levels of turbidity (cloudiness). Availability of low-cost electricity in the village permitted a system design with a slow-sand filter feeding a UV lamp filter. The sand filter is intended to address high turbidity levels and help assure that UV treatment operates successfully. UV lamp treatment is highly effective in disabling pathogens in drinking water, but its effectiveness is reduced when particles in the water block UV rays. The project's two consulting engineers suggested a third filtration stage, an activated carbon canister, be added to assure the taste quality of the water.



On June 29, 2006, the new system began providing potable drinking water to the 110 residents of La Cienega, the poorest of the three project locations. For the first time in decades these villagers had a source of clean, safe drinking water within their community. Previously, the only option for potable water was to purchase five gallon bottles of drinking water from outside vendors for \$2.00 per bottle. The prevailing wage in the area is about \$8 per day, so families often could not afford bottled water. Public health and economic impacts of the new drinking water system will be immediate and dramatic. Water testing and surveys of consumer satisfaction will continue for the remainder of the year.