



Clearing "Dirty Water" without waste!

By Suzanne Michaels

Las Cruces Utilities has targeted five areas of town to try out a new way to flush iron and manganese sediment from our water system, without spilling water down city streets during fire hydrant flushing. Up until now, hydrant flushing was our only option to clear water lines in parts of town experiencing red water. Over the next week, however, you may see the NO-DES truck around town, being tested for 5 days in Las Cruces.

The naturally occurring minerals from our bolsons cause our occasional red water or "dirty water" events. As the minerals flow through the Utility water system, they build up over time inside our water lines. Then, when there is a sudden change in velocity in the pipe due to a water pipe break, or higher volume of water being demanded of the system, the settled minerals in the pipe are stirred into the water, turning it red.



Eric Lopez, Water Resources Administrator, explains, "Eventually, all areas of our system will need to be flushed. But we're exploring new ways of managing this issue, without running water down the streets. One option is this new NO-DES technology that filters out the minerals... but it's not cheap. We want to test it out to weigh its effectiveness and advantage to residents against the cost."



It works like this: a NO-DES truck and 20-foot trailer with a massive filtering system pulls up between two fire hydrants in a neighborhood where residents are starting to experience red water.

Employees run a bright yellow, heavy-duty, 5-inch diameter hose from one hydrant to the filtering system on the trailer... and a second hose to the second fire hydrant.

Both fire hydrants are opened, filling the

hoses and filters. A large pump on the NO-DES unit then circulates the water at a very high speed: 3 to 5 feet per second, “stirring up” the iron and manganese inside the water main.

The minerals are removed as the water passes through the extremely fine NO-DES filters, and a small amount of chlorine is also added during the process. It takes 45 minutes from start to finish, although only 10 minutes to actually clear the lines, and no water is flushed down the street.



Chris Wilkinson, President of NO-DES and developer of this technology, says, "In essence, we create an above-ground loop in the water distribution system with a portable filtering and disinfection system in the middle. This process results in improved water quality... and conserves two vital natural resources - water, and the energy it took to produce and pump it."

notes, "Water Resources staff was impressed with the whole concept of being able to filter the water and clear the lines without flushing many gallons of water down the street. We want to give this a shot, and see how well it works, and how the Las Cruces community responds to this new option for cleaning our water distribution lines."

Utilities' Water Resources had a demonstration of the process over the summer, and was impressed. Eric Lopez

Other cities around the country, also faced with water quality issues in their distribution systems while they are trying to conserve water, are testing out the NO-DES technology. Most are considering contract operations, leasing the equipment, or purchasing a unit. Utilities is seeking alternatives to the practice of hydrant flushing while continuing to provide high quality, clear drinking water to our community.



Las Cruces Utilities provides GAS – WATER – WASTEWATER – SOLID WASTE services to approximately 100,000 Las Cruces residents. You can reach Las Cruces Utilities at (575) 528-3511 from 8 a.m.-5 p.m. Monday-Friday.