

## The Iron Issue

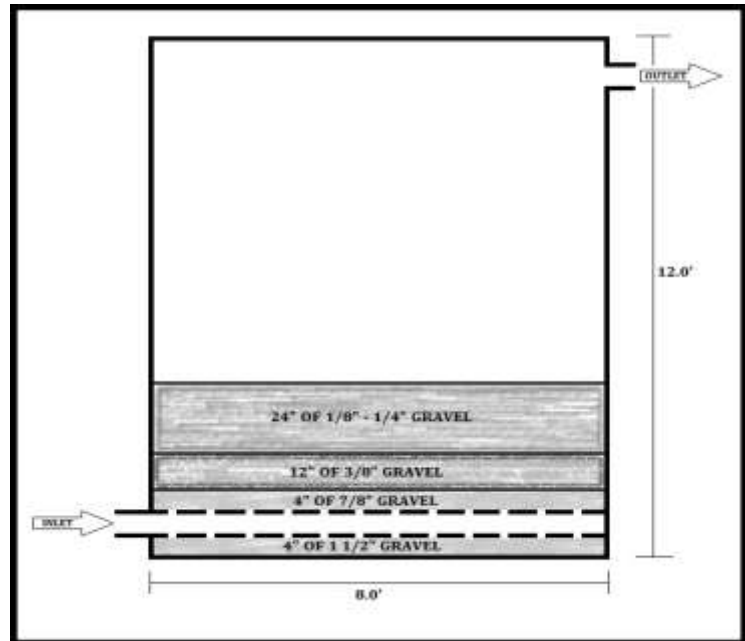
Every year, during the rainy season, the aquifer that supplies raw water for the entire community is inundated with finely dissolved iron. This iron oxidizes and becomes a yellow, orange, or brown color, depending on the concentration.

The Circle Oaks County Water District has now, for the last few months, been in consult with an engineer to help remedy this problem forever, regardless of whether or not the iron levels ever come back down. Currently, we are treating the situation as if it will be permanent, and we are modifying the treatment process to handle the less-than-optimal raw water.

We have already succeeded in producing clear drinkable water again. The issue now is that it will take a few months to flush the iron out of the system as our water system holds hundreds of thousands of gallons of water.

The water does have iron in it, but, it's harmless. You would need to drink 50 gallons of it in one day, just to reach your recommended daily value of iron. Those people who have iron sensitivities should avoid drinking the water as it may result in an upset stomach.

As time goes on, the iron tinted water will become less and less concentrated as it is currently being diluted by the clear, iron-free water that is being produced. It may take some time, but it will get better; and because of advancements we have made, most likely stay better.



An image depicting the layers of media & flows of the new roughing filter.

## We are working on it...

We know all about the iron issues residents are having, and we have been taking steps over the last few months to come up with a solution to fix the problem permanently.

A new "roughing filter", will be installed at the water treatment plant. Hills have been carved, retaining walls placed, and an order for a custom 12' tall by 8' wide poly tank has been made.

This tank will be equipped with a influent manifold to equally distribute water across the 26,000 cubic inches of various sized gravel media. This will allow significantly more contact time and more thorough mixing of pre-treatment chemicals than the antiquated pre-treatment system.

The new roughing filter will also reduce water waste in the

current treatment process significantly.

Other needed modifications for the new unit, like new chemical pumping systems, chemical storage, influent, effluent, and waste pipe & valve assemblies, etc. will also be needed. The water district is pushing hard to complete this project as soon as possible, though it still may take several months to complete.

In the mean-time, the water district management, operations, and Board of Directors are open to all inquiries about the process or concerns.

To contact the office, management, or operations visit the water district website at:

[WWW.COCWD.COM](http://WWW.COCWD.COM)