City of St. Cloud Billing/Utility Services

Frequently Asked Questions

1. **Why is there colored water in the water system?**

   The most common way is through naturally occurring minerals in the water reacting to other substances they come in contact with. Though the raw groundwater is treated to make it safe to drink, there are many compounds still in it. Those compounds are allowed and are safe to drink.

   Another reason water may be discolored is because it is turbid. Turbid means it has compounds in it that do not dissolve in the water. This can occur because it has not been filtered out, it is too small to filter out or it enters the distribution system after the treatment process. There are times when resin, from the processing system, may be passing through the filtering system. Also, sediment can be introduced into the system, after treatment.

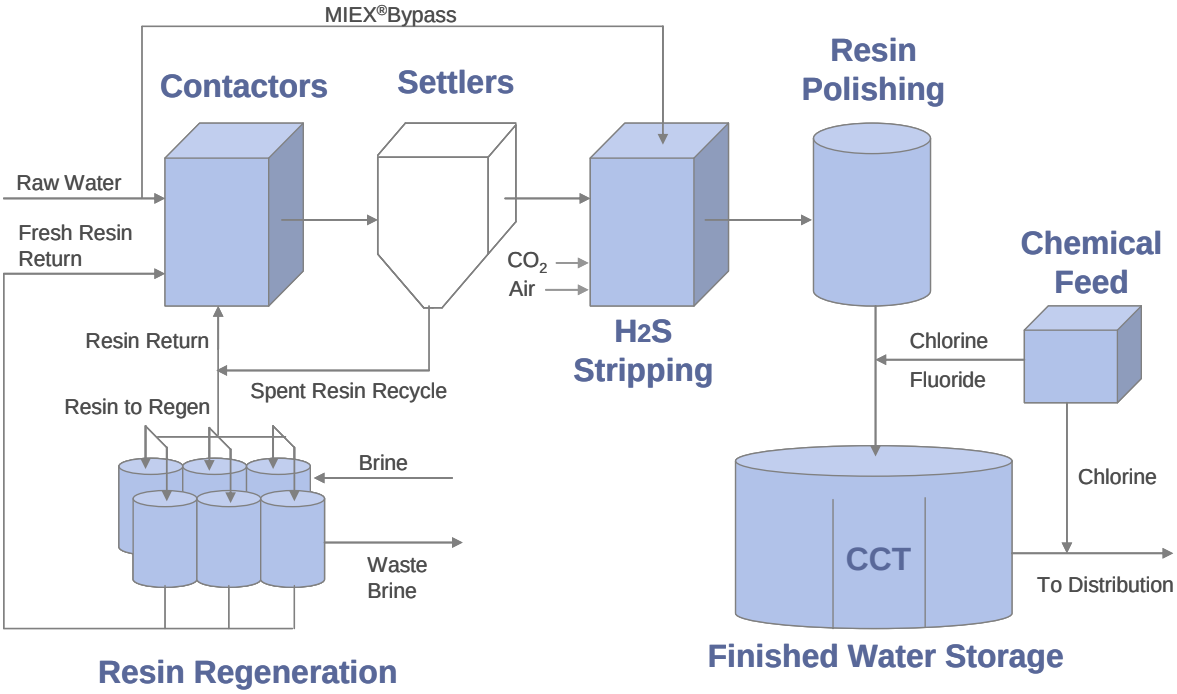
2. **Is the water supply safe to drink?**

   Although the water has color, it is still safe to drink. The discoloration in the water may stain white household items, ie: clothing. At this time, we are still working to pinpoint the cause of the discoloration, and a solution. If you experience discolored water or sediments in your water, please call 407-957-7344 or email us at customerservice@stcloud.org to report the issue to the City of St. Cloud. We will send staff out to flush the lines. Once the exterior water lines are flushed, the pipes within your house will also need to be flushed. This can be accomplished by turning on several cold water taps in your home to allow new water to work its way into your pipes. Let the water run until the water runs clear.

3. **What is being done to resolve this issue?**

   The City of St. Cloud is investigating the cause (s) of this issue. We are diligently working with the manufacturer of the resin that is used to remove any of the impurities in the water, along with an outside consultant to ensure the treatment plant is operating at its maximum efficiency. We are also checking the raw water source to determine if its chemical makeup has changed, which may impact the treatment process. We are in the process of designing a more robust water polishing process (water filtering) for water treatment plant #4. We believe these new polishers may help minimize resin loss and improve efficiency.

4. **How does the City of St. Cloud Water Treatment Plant #4 operate?**



The exhibit above shows the treatment process. The three groundwater well pumps feed raw water to the elevated contactors containing the resin. Following separation of the resin from the treated water in the settlers, the water flows by gravity through a hydrogen sulfide stripping system, through resin polishing units, disinfection, fluoridation and to ground storage tanks prior to distribution. Salt is used to regenerate the spent resin. Waste brine is sent to the City's wastewater treatment plant to treat prior to final disposal.

5. What is resin and why is the City using resin in its water treatment process?

Resin is an additive in the water treatment process that removes organic impurities from our raw water source. It is charged in a way that creates a strong attraction to the organic impurities which helps remove them from the water. After the organics have been removed, the water is then chlorinated and fluoridated to meet the Florida Department of Environmental Protection (FDEP) and Federal drinking water standards.

6. Why is there resin loss?

Resin loss is a known part of this type of water treatment process. Recently, Water Treatment Plant #4 has experienced an increase in resin loss. This additional resin loss may have contributed to the increased color water concerns we have received. The City of St. Cloud is working with Jones Edmunds and Associates to try and find a solution to the increased resin loss at Water Treatment Plant #4.

7. **Can Water Treatment Plant #4 distribute water without using resin?**

   Yes, Water Treatment Plant #4 can bypass the process that uses the resin. However, without this process, the water quality would decline, including a sulfur odor. During warmer months, we'd also have a higher risk of not meeting FDEP regulations. Violating these regulations is not an acceptable practice.

8. **What are the affected areas?**

   The City of St. Cloud Utility has been tracking and responding to water color issues. The majority of the issues have been reported in Deer Creek, Stevens Plantation, Anthem Park, Pine Lake Estates and Canoe Creek Lake. These neighborhoods are closer to Water Treatment Plant #4 and this appears to have a direct impact on the number of color water occurrences.

9. **What can I do to remove the stains?**

   The City of St. Cloud has reached out to the manufacturer of the resin to see if there are ways consumers can safely remove any orange stains. Some customers have had success with Persil laundry detergent. Once received, we will share the solution to remove the stains. With respect to the potential for dissolved iron, we recommend using non-chlorine additives to whiten, as a precaution. This is also true when using chlorine type cleaners in your toilets.

10. **How long before this situation is resolved?**

    We stated in our original press release that it could be 14-18 months. However, that is for the larger project of repairing the polishing units. Repairing the polishing units is a lengthy process that involves design, bidding and construction. It is important to note, this is only one item that may or may not be a contributing factor to the current discoloration situation. We are hoping the plant tour and meeting with the resin manufacturer and our engineering consulting firm will bring to light intermediate solutions.

11. **Will I be impacted by this situation if I don't live in the target area?**

    We believe this is localized to a two mile radius of water treatment plant #4, but will not dismiss or ignore any information we receive.