



# Under Sink Reverse Osmosis (RO) Systems Fact Sheet and Frequently Asked Questions

#### What is reverse osmosis, or RO, and why am I receiving this information?

Reverse osmosis (RO) is a water filtration system that will remove natural or man-made compounds sometimes found in household water. A RO system is being made available for your home as analytical results indicate either: a) an individual per- and polyfluoroalkyl substance (PFAS) has exceeded the concentration of 10 ng/l; b) the total combined PFAS concentration has exceeded the concentration of 70 ng/l; or, c) the total Gen-X concentration has exceeded the concentration of 140 ng/l in the sample taken from your well. These systems are being offered to you in compliance with the consent order agreement between the state of North Carolina, Chemours and the Cape Fear River Watch.

Previous work in other states has identified RO as a proven, accepted method for reducing PFAS contaminant concentrations in well water. The RO system proposed for use in your home has a series of filters and a specialized RO membrane. The filters serve to remove sediment, iron, and some other compounds (including minor amounts of PFAS). The RO membrane has been demonstrated to remove the majority of PFAS compounds that might be present in the water. RO systems work by passing water through a special membrane. Information on how RO systems operate and their application to PFAS contamination can be found at the following links:

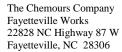
#### **American Water Works Association**

https://www.awwa.org/Portals/0/AWWA/ETS/Resources/AWWAPFCFactSheetTreatmentandRemoval.pdf

Clean Cape Fear/North Carolina State University (K5 is presented on the third slide) https://www.cleancapefear.org/water-wednesday-july-26-2017/

#### Where are the RO systems installed?

The RO system selected will be installed in up to three areas of your home if you have a single PFAS substance greater than 10 ng/l or combined PFAS substances greater than 70 ng/l. If you have concentrations of Gen-X greater than 140 ng/l you can have RO systems installed at all kitchen and bathroom sinks in your home. The contractor will attempt to install the systems within a cabinet under the sink. In some instances where there is not enough space to install the system under the sink, the unit will be installed to be as unobtrusive as possible.





#### What type of results can I expect with the RO systems?

Greater than 90% reductions in PFAS compounds can be expected from the Kinetico K5 RO unit based upon studies conducted by Dr. Knappe at NC State University. In addition, the Kinetico K5 RO system will remedy the following water supply issues:

- An operating RO system tends to decrease the pH of the water making it more acidic. The
  system to be installed in your home has a pH balancer installed to ensure the water does
  not become more acidic (Source: AWS-Kinetico).
- In addition to removing unwanted compounds from your water, the RO system will remove compounds such as calcium, magnesium and other minerals. Previous users have indicated they did not like the taste of the water provided by the RO system. The system to be installed in your home will add small amounts of calcium and magnesium back to the water at the end of the process to improve taste and to provide these minerals in your water (Source: AWS-Kinetico).

#### Will I have to pay for the RO system or installation, or buy new plumbing?

There will not be a charge for installation or maintenance of any RO components at your home. Chemours will pay for the RO systems, standard installation, and maintenance/replacement of the systems per the signed Consent Order between Chemours, the state of North Carolina and Cape Fear River Watch. You will not have to provide any plumbing hardware or other materials for the installation.

#### Will the RO system provide all my water needs?

The RO system is designed to provide water for ingestion. The RO will provide water for drinking, making coffee or tea, mixing baby formula, ice machines, cooking, etc. The RO system does not generate enough water for bathing/showering, washing dishes or clothes, or outdoor use. The RO system will provide up to 50 gallons of filtered water per each unit per day. This amount is expected to provide enough amounts for drinking, coffee making, tea brewing, refrigerator ice machines, cooking, and any other water consumption needs for the family.

#### What does the RO system look like?

K5 RO System from Kinetico:

https://www.kinetico.com/drinking-water-filtration-systems/kinetico-k5-drinking-water-station/(YouTube link:)

https://www.youtube.com/watch?v=9XOLiHReHVs





#### Who will be installing the RO system?

Advanced Water Systems Group, an authorized installer of Kinetico RO equipment (AWS-Kinetico), will be installing NCDEQ approved RO systems. Chemours contractor Parsons will be managing and monitoring the RO system installation work. When residents confirm they want RO systems with Chemours, their contact information is relayed to AWS. AWS will then contact you directly to set up an in-home visit and schedule the RO systems installation. Chemours contractor Parsons will be managing and monitoring the RO system installation work. All AWS-Kinetico staff will be in company branded service vans, wearing AWS-Kinetico branded uniforms and will have an AWS-Kinetico identification badge with them.

#### How long does it take to install the RO systems?

AWS-Kinetico will contact residents to schedule an in-home visit with an AWS-Kinetico professional to assess the locations where RO systems are to be installed. During this visit a work order will be generated and the installation team will follow up with the resident to schedule RO installations. Installation of the RO systems will take less than one day.

# Will I be able to contact someone if there are problems or my filters need replacing?

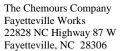
Yes. You will be provided a contact number for AWS-Kinetico, and a representative will call back the next business day. AWS-Kinetico will be responding to maintenance issues or problems with the RO systems.

#### How do I know the RO system will work to remove the PFAS?

Previous research indicates RO systems are effective at removing PFAS from water. Per the signed Consent Order, testing of water at some residences will be implemented to ensure PFAS compounds are being removed by the RO systems. This information is outlined in the drinking water compliance plan submitted to NCDEQ.

#### How will I know when it is time to replace the RO membrane and/or filters?

The RO systems have two mechanisms to let you know it is time for replacement. One, the water from the system faucet will slow to a small trickle. Two, a blue indicator will become harder to see in the sight tube. When either or both occur, you will call the number provided by the RO system installer, and listed on the side of the K5 RO unit. A representative will then contact you to schedule filter and membrane change out.





# I have heard the RO systems can cause some water quality issues not related to the PFAS contamination. How will those be resolved?

The RO systems selected will balance the pH to reduce corrosion problems and have a "remineralization" feature that adds calcium and magnesium back to the finished water to improve taste and for the benefit of essential compounds.

### How long will it take to install the RO system?

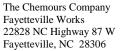
Once you receive the letter from Chemours stating you qualify for RO systems you must notify Chemours of your intent to accept installation by calling 910-678-1101 and leaving a message with your name, phone number and residential address. All messages left at the 910-678-1101 mailbox are reviewed and documented by Chemours and their contractors. You should expect to receive a call back within two business days confirming your acceptance of the RO offer. RO systems are installed in the order of response. Your information will be relayed to AWS-Kinetico, the installer, who will contact you as soon as possible to schedule the install and answer any additional questions. AWS-Kinetico will schedule a preliminary visit to determine areas you have selected for the installation and will answer any questions you have. After the preliminary visit, AWS-Kinetico staff will return for the installation itself. The process will take a few hours to install all the K5 RO systems in your home. The install is dependent on access to sufficient space where the system will be installed, whether stone or tile countertops must be drilled through to place the RO faucet, and other factors.

### By accepting RO systems do I indemnify Chemours from future liability?

No, RO systems are being offered per the terms of the signed and agreed to Consent Order between NCDEQ and Chemours.

#### How long will Chemours maintain the RO systems and where can I confirm that in writing?

Chemours will provide and maintain RO systems per the terms of the Consent Order as described in Sections 20 and 24. Section 24, paragraph a., sentence (4) details the required period for maintaining replacement drinking water filtration systems as a minimum of 20 years.





# How long do I have to consider the RO offer, will I get cutoff from bottled water while I think about it, will I get cut off from bottled water if I decline?

Chemours will continue to provide bottled water to residents that qualify for RO systems for a period of three months after they receive the RO letter or when they decline the RO offer—whichever is sooner. You will no longer be provided with bottled water once your RO systems are installed. Chemours will eventually stop providing bottled water to residents that they do not receive any response from.

# If I decline the RO system offer is it a one-time offer? May I change my mind at a later date after I decline the offer?

Chemours understands some residents would prefer to wait until they hear feedback from friends and family that receive the RO system before they commit to RO installations in their home. Therefore, Chemours will give residents a grace period of one year from the date of the initial offer to consider the offer or change their mind if they have previously declined the RO offer.

# What happens if I do not accept or decline the RO system offer?

You will be provided with bottled water for three months after receiving the initial RO system offer letter as stated above. The RO system offer is good for a period of one year after you received the initial RO system offer letter.

#### Who do I contact if I have questions?

#### **NCDEQ**

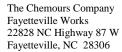
Please direct GAC and RO related questions for NCDEQ to the Division of Waste Management, at **919-707-8200**. Ask the NCDEQ receptionist to speak to someone regarding GAC systems around the Chemours facility.

#### **Chemours**

Call **910-678-1101** and leave a detailed message. Your message will be recorded, reviewed by Chemours and its contractors, and you will receive a follow-up call.

#### **AWS-Kinetico**

If you have specific RO questions for AWS-Kinetico please contact 910-678-1101.





### Where can I get more information?

More information on Gen-X, PFAS and RO systems are available at the following websites:

# NCDEQ Gen-X Investigation and link to the Consent Order

https://deq.nc.gov/news/key-issues/genx-investigation

#### Chemours Fayetteville Works – Gen-X

https://www.chemours.com/Fayetteville-Works/en-us

#### **Cumberland County Department of Health – Gen-X**

https://www.co.cumberland.nc.us/departments/public-health-group/public-health/environmental/genx-information

#### **RO Overview YouTube link:**

https://www.youtube.com/watch?v=CMFnFlylJM0

#### Other:

https://iaspub.epa.gov/tdb/pages/contaminantProcess/contaminantProcessOverview.do https://pfas-1.itrcweb.org/wp-content/uploads/2018/03/pfas\_fact\_sheet\_remediation\_3\_15\_18.pdf