

Chlorine Dioxide and Unusual Odors

Central Elmore Water & Sewer Authority uses chlorine dioxide gas as a disinfectant at the water treatment plant. Chlorine dioxide is used in the beginning of our treatment process to reduce the formation of cancer-causing compounds such as trihalomethanes. It is an excellent pretreatment disinfectant but can cause short-term odor problems for customers. When a water tap is opened, small amounts of chlorine dioxide gas diffuse into the air and combine with existing household odors. All homes have volatile organic compounds (VOCs) in the ambient air produced by scented products (soaps, candles, air fresheners, incense, potpourri), cleaning agents or solvents, paint, carpet, furnishings, fresh flowers or wreaths, and many other common household items. The VOC/chlorine dioxide combination odors have been described as smelling like fuel oil, kerosene, chemicals or cat urine, to name the most common. The strongest odors are associated with installing new carpet, upholstered furniture or draperies and interior painting. The odor will continue until the level of VOCs decreases (new smell goes away). This can take from a few weeks up to several months to dissipate depending on the situation, type of materials, amount of ventilation, etc. In enclosed areas with little ventilation, such as laundry rooms, basements, bathrooms and closets, these compounds will accumulate, so the odor will tend to be stronger or last longer than in well-ventilated areas. Increasing ventilation by opening windows and turning on fans will help to eliminate the odors more quickly. Alternatively, you can remove chlorine dioxide and other chlorine compounds from the water by using an activated carbon filter. This will prevent the formation of compounds causing unpleasant odors.