

Odors Associated with New Carpet and Running Tap Water

In very rare incidents over the last several years, consumers have reported the development of an odor in their home when they run their tap water. In each case, the consumer had recently installed new carpet. Descriptions of the odor this produces have ranged from a “chemical smell”, to an “earthy smell”. Reports involving complaints of this nature have averaged less than 1 per year over the last 10 years.

Water treatment facilities must rely on various types of chemical additives to disinfect and maintain our sources of drinking water. One of these treatments is chlorine dioxide gas. Water treatment facilities have reported that the use of chlorine dioxide in water treatments has been linked with the development of non-toxic odors associated with volatile organic compound (VOC) emissions released by interior building and decorating materials, including new carpet. It has been reported that the intensity of the odor produced by this interaction increases with the increased use of chlorine dioxide in a water treatment. Conversely, the production of odors associated with the interaction between chlorine dioxide gas and new carpet VOC emissions dissipates as the VOCs emanating from the carpet continues to evaporate.

Water containing a high level of chlorine gas has also been linked to the production of odors in homes that have been recently carpeted when water is used in the home.

The development of an odor in a recently carpeted home that occurs when running tap water is not caused by any defect in the materials used in the manufacturing of a carpet, or by the release of emissions unfamiliar to the VOC emissions associated with new carpet.

Written by: Mark Johnston
Technical Services Staff: Mark Johnston,
Tammy Smith, Tonya Monk, Greg Raborn