

FACT SHEET

Taste & Odor

What causes taste and odor in drinking water?

Organic matter in the water source is the primary cause of any taste or odor in our drinking water. In the spring and fall the amount of organic matter, like leaves or other vegetation, typically increases due to seasonal changes. Melting snow and hard rains will wash the organic matter into the rivers and streams. In addition, ice jams and high river flows scrape the river bottom, stirring up debris that has been below the surface of the water for many months. These materials that have been washed into or scraped off the bottom of the rivers will combine with the chemicals added during water processing to cause the noticeable changes in tastes and odors that periodically occur in our drinking water.

What are the health effects of these tastes and odors?

There are no adverse health effects associated with the tastes and odors. The organic matter is not made up of living organisms or pathogens that can make people sick. Even though your water may have an earthy or chlorine-like taste or odor, it is safe to drink, meeting or exceeding the Environmental Protection Agency's (EPA) drinking water standards.

Why are the tastes and odors not removed during the treatment process?

Most are removed. However, even very small amounts of the organic matter can greatly impact tastes and odors. To help reduce tastes and odors in your drinking water, Des Moines Water Works (DMWW) will make timely switches between our source waters as needed to ensure the highest quality of water possible. DMWW water sources include the Raccoon and Des Moines Rivers, underground infiltration gallery at Water Works Park, shallow groundwater at L.D. McMullen and Saylorville Water Treatment Plants, the Maffitt Reservoir. In addition, powdered activated carbon is added at the Fleur Drive Treatment Plant. This material absorbs taste- and odor-causing compounds before settling out in the treatment process. The effective use of chlorine also destroys objectionable tastes and odors.

Is there more chlorine than normal in my drinking water?

The Iowa Department of Natural Resources requires our drinking water to contain a measurable amount of chlorine throughout the distribution system. Most samples measured contain between 0.3 and 0.8 parts per million of chlorine, the level needed for effective disinfection. The dosage added at the treatment plant will vary from time to time so that the required level in the distribution system is maintained. In most situations, a trace level of chlorine improves the taste and odor of the water.