

Grants Pass Water Laboratory, Inc

Quick Guide to Common Taste and Odor Problems

| Sensory Cue | Contaminant Source | Treatment Option |
|---------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| What the water looks like | | |
| Brown-red water stains and discolored clothing | Iron; groundwater | Manganese greensand filter; chlorination; filtration; sequestering agent |
| Yellow Water | Tannin (humic acid); surface water | Anion exchange; chlorination |
| Black-stained fixtures and laundry | Manganese; groundwater | Manganese greensand filter |
| Blackening and pitting of Stainless Steel sinks | Chloride; surface and groundwater | Reverse osmosis; ion exchange |
| White deposits in pipe, water heater, soap scum | Hard water; surface and groundwater | Water softening |
| Milky Water | Particles, air; surface and groundwater | Flush Lines; Install air release valves at high points in distribution system; clean hot water heaters; service filters |
| Grittiness | Fine Sand, grit; groundwater | Sand trap; run well pumps at lower gpm |
| Turbidity | Dirt, clay, silt, organic matter; surface water | New well screen; sand trap; chlorination; enhanced coagulation/filtration; run jar tests |
| Blue-green stains on sinks and porcelain fixtures | Brass, copper; surface and groundwater | Stabilize water; pH adjustment |
| What the water smells like | | |
| Musty, earthy smell | Organic matter (leaves and algae,); surface water | Copper sulfate treatment of surface water; activated carbon; multilevel intake (seek other source) |
| Chlorine smell | Chlorine; surface and groundwater | Activated Carbon; correct chlorine feed; dechlorinate |
| Detergent smell (foamy water) | Wastewater discharge into water supply; surface water | Eliminate source; chlorination |
| Rotten Egg Smell | Dissolved hydrogen sulfide gas; groundwater | Chlorination; manganese greensand filter; aeration |
| What the water tastes like | | |
| Metallic Taste | Iron, manganese; groundwater | Chlorination; aeration; softening sequestering agent |
| Salty brackish taste | Sodium chloride, sulfate, inorganic salts; groundwater | Reverse osmosis; ion exchange |

Adopted from the EHMI Water "Sense" Wheel™, Environmental Hazards Management Institute