Quick and Easy Chart for When Water Quality is Down and Dirty

How does it look?	Contamination / Source	Treatment Option
Brown-red water stains and discolored clothes	Iron; groundwater	Manganese green sand filter, chlorination; filtration, sequestering agent
Yellow Water	Tannin (humic acid)	Anion exchange, chlorination
Black-stained fixtures and laundry	Manganese; groundwater	Manganese green sand filter
Blackening and pitting of stainless steel sinks	Chloride; surface and ground water	Reverse osmosis ion exchange
Milky Water	Particles, air: surface and ground water	Flush lines; install air release valves at high points in distribution system; clean hot water heaters; service filters
White deposits in pipe, water heater, soap scum	Hard water; surface water and groundwater	Water softening
Turbidity	Dirt, clay, silt, organic matter; surface water	New well screen; sand trap; chlorination; enhanced coagulation / filtration; jar test
Grittiness	Fine sand, grit; groundwater	Sand trap; run well pumps at lower g.p.m.
Blue-green stains on sinks and porcelain fixtures	Brass, copper, surface and groundwater	Stabilize water; pH adjustment
How Does it Smell?	Contamination / Source	Treatment Option
Musty, earth smell	Organic matter (leave 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; chlorination
Detergent Smell (foamy water)	Waste water discharge into water supply; surface water	Eliminate source; chlorination
Rotten egg smell	Dissolved hydrogen sulfide gas; groundwater	Chlorination; aeration; softening sequestering agent
How Does it Taste?	Contamination / Source	Treatment Option
Metallic taste	Iron, Manganese; groundwater	Chlorination; aeration; softening sequestering agent
Salty brackis taste	Sodium chloride, sulfate inorganic salts; groundwater	Reverse osmosis; ion exchange

Source: Apdated from Opflow, March 1994; American Water Works Association