Poor water quality can cause serious problems in open-loop systems. Your water should be tested for hardness, acidity and iron content before a heat pump is installed. Your contractor or equipment manufacturer can tell you what level of water is acceptable.

Mineral deposits can build up inside the heat pump's heat exchanger. Sometimes a periodic cleaning with a mild acid solution is all that's needed to remove the build-up.

Impurities, particularly iron, can eventually clog a return well. If your water has a high iron content you should be sure that the discharge water is not aerated before it's injected into a return well.

Finally, you should opt against using water from a spring, pond, lake or river as a source for your heat pump system unless it's proven to be free of excessive particles and organic matter. They can clog a heat pump system and make it inoperable in a short time.