

Perchlorate Removal

Perchlorate is a naturally occurring and manufactured chemical anion commonly used as an oxidizer in rocket propellants, munitions, fireworks, airbag initiators, matches and signal flares. It is also naturally occurring in some fertilizers. In 2011, USEPA announced its intention to regulate perchlorate in drinking water, but has not yet proposed a maximum contaminant level (MCL).

Two states currently regulate enforceable standards for perchlorate in drinking water. California at 6 ppb and Massachusetts at 2 ppb. In 2015, California's Office of Environmental Health Hazard and Assessment (OEHHA) reduced the Public Health Goal from 6 ppb to 1 ppb.

Ion exchange is the most proven and widely accepted physical process technology to meet existing perchlorate treatment goals. Common anions in groundwater, including nitrate, sulfate, and bicarbonate compete with perchlorate for exchange sites on resin. This competition and the expense and inefficiency of regeneration drives the resin selection for perchlorate removal systems toward the perchlorate selective resins available today. These single use treatment systems maximize bed volume throughput to minimize operational costs. Loprest offers lead/lag systems to maximize the effective life of the resin in the lead vessel. All Loprest systems are of the highest quality and meet local, state and federal design requirements including, ASME, EPA, NSF61, DEQ, DDW, and Ten States Standards.

