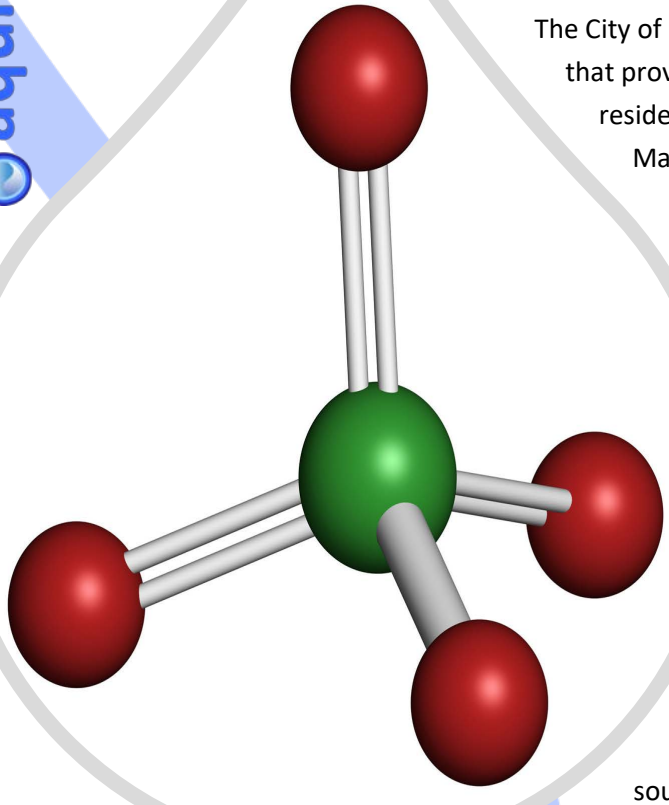
aquilogic

Morgan Hill Perchlorate Contamination



The City of Morgan Hill operates municipal water supply wells that provide drinking water to City residents. However, many residents in the City, and residents in the community of San Martin to the south, have their own private water wells.

Olin Corporation operated a 13-acre facility on Tenant Road in Morgan Hill that manufactured signal flares. Standard Fusee subsequently leased the land and continued to manufacture flares. Potassium perchlorate was used in the manufacturing of flares by both Olin and Standard Fusee. Waste materials generated during the process were discharged to an unlined pond at the site where they seeped into the underlying groundwater.

Starting in the late 1990s, perchlorate was detected in private water wells immediately to the south of the Olin facility in San Martin. Subsequently, perchlorate was also detected in municipal wells in Morgan Hill and then in Gilroy. By 2006, the perchlorate plume extended ten miles to the south of the Olin facility.

Aquilogic staff were retained by the City of Morgan Hill to review regional hydrogeology, water production records (for municipal and private wells), and site documentation for the Olin property. This included well logs, construction details, geophysical logs, aquifer testing reports, pumping records, water level data, and geochemical analysis of samples from the wells. The documentation for the Olin site included site operational records, environmental investigation data, and site contaminant removal actions. Based upon the review, the Olin property was confirmed as the source of the perchlorate, and the fate and transport of the contamination was evaluated. Recommendations for additional investigation and remediation were provided to the City, who negotiated with Olin to implement this work. In addition, a temporary ion exchange groundwater treatment system was designed, permitted, and installed at one of the City's municipal supply wells to remove perchlorate from the water.