



CASE STUDY

ENVIRONMENTAL HEALTH AND SAFETY

Potable Water at a Municipal Facility

OVERVIEW

CM3 Environmental was engaged to address pressing potable water quality concerns at a municipal facility, where testing had revealed elevated lead concentrations. These findings posed potential neurological and renal health risks to the building's occupants. The project's primary objective was to safeguard their health and well-being through a comprehensive lead management program, encompassing water sampling, mitigative actions, and long-term solutions for water distribution system upgrades. This case study provides a detailed account of CM3 Environmental's systematic approach to resolving lead contamination and ensuring sustainable compliance with drinking water safety standards.



KEY CHALLENGES

Initial investigations indicated that sections of the facility's aging water distribution system, including older copper piping and solder joints, were sources of lead leaching. Lead concentrations at select points of use exceeded health-based regulatory limits, necessitating immediate measures to address the risk.

The challenge for CM3 was twofold, beginning with immediate risk mitigation to reduce lead levels to protect the occupant's safety in the short term followed by recommendations for long-term infrastructure improvements to meet current safety standards.



OUR APPROACH

Water sampling at critical locations was conducted throughout the facility to identify patterns of lead leaching and quantify its severity. CM3 collected water samples at the main entry point, monitored taps with the longest retention times and analyzed areas with a history of high lead concentrations. To reduce exposure quickly, a flushing program was introduced to cycle stagnant water through taps with higher lead concentrations. Faucet-mounted filters were installed at high-use points to provide safe drinking water in the meantime.

CM3 then implemented a gradual replacement of aging copper piping and solder joints with modern, lead-free materials. A phased approach was adopted to target the most problematic areas first, ensuring efficient use of time and resources.

This project reinforced the importance of a proactive stance in water quality management. By carefully balancing short-term remediation with strategic upgrades, CM3 successfully delivered a safer, more reliable drinking water system.

Choose CM3 to deliver safer drinking water at your facility.

Through precise sampling, strategic interventions, and infrastructure upgrades, CM3 proved its commitment to environmental health and safety. Municipal stakeholders can rely on CM3 to deliver comprehensive solutions tailored to their unique challenges. This initiative not only safeguarded occupant health in the present but also laid the foundation for sustainable water safety improvements.

For more information on how CM3 Environmental can help your municipality enhance water quality and regulatory compliance.

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