

## Cement Mortar Lining as a Potential Source of Water Contamination

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**Abstract :** Several different cements have been tested to evaluate their potential to leach calcium, chromium and aluminum ions in soft water environment. The research allows comparing some different cements in order to the potential risk of water contamination. This can be done only in the same environment. To reach the results in reasonable short time intervals and to make heavy metals measurements with high accuracy, demineralized water was used. In this case the conditions of experiments are far away from the water supply practice, but short time experiments and measurably high concentrations of elements in the water solution are an important advantage. Moreover leaching mechanisms can be recognized, our experiments reported here refer to this kind of cements evaluation.

**Keywords :** concrete corrosion, hydrogen sulfide, odors, reinforced concrete sewers, sewerage

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