

Sampling and Testing for Perchlorate at DoD Installations – Method Development and Improvement Initiatives

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Abstract

On 29 September 2003, the Office of the Under Secretary of Defense issued the Interim Policy on Perchlorate Sampling. Under the Policy, where required by regulation or where a reasonable basis exists to suspect a perchlorate release has occurred, Components are to assess perchlorate occurrence in drinking water systems, permitted wastewater discharges, environmental restoration sites, and training ranges.

At this time, the only EPA-approved method for the analysis of perchlorate is Method 314.0, which was developed and validated for use in drinking water samples. Method 314.0 is a non-specific method, subject to false positive results from interfering substances. The Method Reporting Limit for Method 314.0 is 4 ppb. In order to monitor perchlorate concentrations below 4 ppb, test for perchlorate in other environmental media, or confirm the presence of perchlorate detected using Method 314.0, alternative technology will need to be used.

The DoD Environmental Data Quality Workgroup (EDQW) and the Intergovernmental Data Quality Task Force (IDQTF) are collaborating on efforts to discuss emerging technology and recommend a path forward for developing, validating, and publishing perchlorate sampling and analysis methods with improved sensitivity and specificity for perchlorate in environmental samples.

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