# Generators Need to be Vigilant About TCLP Sampling Protocol

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The Toxicity Characteristic Leaching Procedure (TCLP), SW-846 Method 1311, was promulgated by EPA pursuant to the Resource Conservation and Recovery Act to test and determine the potential leaching rate of disposed hazardous wastes in landfills. 55 *Fed. Reg*. 11797, 11827 (Mar. 29, 1990); 40 CFR 261.24(a). The TCLP is commonly used to determine if wastes are hazardous wastes. If analytical results of the leachate generated by the test contain certain constituents above regulatory thresholds, then the waste is hazardous waste and must be managed as such.

EPA acknowledges that field samples acquired for TCLP analysis often exceed the allowable size prescribed by the method, so laboratory subsampling or particle size reduction is required. This can cause the physical characteristics of wastes to be altered, causing inaccurate TCLP results. That outcome could be costly to anyone seeking to dispose of waste because waste that would otherwise be non-hazardous solid waste would now have to be managed and disposed of as hazardous waste. Moreover, exceedances of thresholds may trigger additional requirements, such as treatment prior to land disposal.

EPA guidance suggests alternative sampling techniques may be implemented to minimize or eliminate the particle size reduction step and limit a constituent's exposure to TCLP's leachate. EPA OSWER, *RCRA Waste Sampling Draft Technical Guidance, Planning, Implementation, and Assessment*, EPA 530-D-02-002 (Aug. 2002). Because TCLP does not explicitly describe how to perform particle size reduction, an analyst must use his or her best professional judgment to ensure that the sample is representative. G. Hansen, EPA Regulatory Guidance Letter ("RGL"), *Exemption from Particle Size Reduction Step in TCLP*, PPC 9442.1991(13) (Oct. 9, 1991). Practices that cause test results to be unrepresentative are prohibited. For example, cleaning, scrubbing, or freezing are likely not authorized. *Id*.; G. Hansen, EPA RGL, *Particle Size Reduction Procedure for TCLP Samples of Dry Cell Batteries*, PPC 9442.1991(07) (May 29, 1991).

The bottom line is that companies need to understand that particle size reduction can have an effect on TCLP analytical results. If results exceed TCLP thresholds, companies may wish to examine whether particle size reduction of the waste was performed by the lab prior to performing the test and, if so, whether it was necessary and/or was performed properly. This small amount of due diligence might avoid an otherwise expensive regulatory mistake.

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