

Multi Increment Sample



Client

Industry

Facts

Period

2019 - 2024

Project Country

Brazil

The multi increment sampling was performed during a confirmatory investigation in a parking lot where previously operated a galvanoplasty industry. In order to obtain an average concentration of compounds of interest in the area, reducing statistical variability caused by soil heterogeneity, it was decided to apply this methodology.

The area of the old electroplating was defined as a Decision Unit (DU), however there was no information on the location of the old tanks, due to this situation it was decided to sample the soil using multi-incremental methodology.

This methodology, as described by USEPA (2002), consists in collecting multiple increment samples of one DU. The collected increments are processed, forming a representative sample for laboratorial analysis.

These increments were collected from a stratified random sample where 30 shallow surveys were performed collecting approximately 150g of incremental sample per point, to be later processed and homogenized and to compose a single final soli sample representative of the entire DU. For qualitative control purposes, a replicate sample was collected following the same procedure.

The objective of this methodology is to obtain an estimate of the average concentration, reducing uncertainties related to the investigation and the statistical variability when compared to conventional sampling methods.

Contact Persons