

Development of simple analysis method of dioxin under the ground

[Point]

It is required to develop the technology for rapidly recognizing pollution that is caused by dioxins in the soil in order to implement the project efficiently. Therefore, rapid pretreatment method and rapid analysis method of samples were studied for the purpose of establishing simple analysis method of dioxins.

As a result, it was revealed to be possible to apply fast solvent extraction method and heating flow-down method as rapid pretreatment method. Furthermore, it was revealed to be effective to appropriately combine analysis by TOX calculation of refractory halogenated organics (SNVOX) and immunoassay technique, in which TEQ of dioxins was estimated by measuring alternative material by quadruple GC/MS, as rapid analysis method.

Keywords: dioxins, simple analysis method, rapid pretreatment method, TOX calculation, quadruple GC/MS, immunoassay technique