PIXE analysis of heavy metals in temporary yard of disaster waste

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Abstract

The "Great East Japan Earthquake" and the following tsunami generated disaster waste of about 5 million tons in Iwate prefecture. The prefecture set some parts of the coastal area as temporary disaster waste collection sites. We have conducted the analysis to examine the distribution of heavy metal elements in the soil of the sites, which are private lands, so that the obtained results can be utilized for the prefectural survey to confirm the safety of the lands before they are returned to their owners.

Soil analysis was conducted through the elution test and the content test according to the legal procedure. Besides, the applicability of PIXE has been examined to facilitate the analysis.