

Discriminate of Underground Water Use by Analyzing Stable Isotopic Ratio in Wastewater

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The amount of wastewater discharged to sewer is regarded to be equal to the amount of used drinking water. Many businesses such as public bath and hotel often use underground water. However, the fact of the use relies on the spirit of compliance. So the studies were made to detect the use of underground water by analyzing of stable isotopic ratio in wastewater. As a result, stable isotopic ratio does not change with the use of water. Although the suitability of this method is affected on geology of Tokyo, in the area where the difference between underground water and tap water is large enough, stable isotopic ratio analysis brings an effective mean to discover the unreported use of ground water by sampling wastewater at each business outlet.