

## Feature of distribution of radioactive cesium in irrigation canal

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The purpose of this study is to clarify distributive characteristics of a radioactive cesium in the irrigation canal by examining the radioactive cesium contained in the bottom sediment along the canal from its intake to the downstream. One of the millrace located in Fukushima Prefecture was selected as a case for investigation, and the distribution of the amount of the sedimentation, the concentration of radioactive cesium in the bottom sediment, and the air dose rate were examined. The sandy deposit was seen in the upstream of the canal, and those concentration of radioactivities Cs were comparatively low with 1-5kBq kg<sup>-1</sup>. On the other hand, relatively high concentration of radioactivity Cs was seen in the downstream of canal, and was within 3-28kBqkg<sup>-1</sup>. The air dose rate in the waterway were relatively low because of the influence of ponding, relatively high air dose rate were seen in the place where the depositional surface had been exposed.

Keywords: radioactive cesium, irrigation canal, sediment, air dose rate