

Residues from water works: Data collection for a dose assessment close to reality

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Abstract

According to publication of the Council Directive 2013/59/EURATOM (Basic Safety Standards, BSS) the member states have to implement this new regulation into national law. Among other subjects, there are new aspects concerning NORM legislation in Germany. One of them is the occurrence of ground water filtration facilities in the list of industrial sectors according to annex VI.

The DVGW (German Technical and Scientific Association for Gas and Water) runs a working group dealing with radioactive substances and water. Among others, experts of the Federal Office for Radiation Protection (BfS) are group members. One of the main topics was to evaluate the consequences of the BSS for German water suppliers. Concerning a radiological dose assessment, information were available only partially. Therefore, this working group designed a concept of performing a survey among water suppliers. The main idea was to establish a detailed database for all parameters relevant for a dose assessment. On one hand, the water suppliers had to be asked about the occurrence, consistence and fate of water work residues. On the other, some samples were taken for the determination of the content of natural radionuclides. The DVGW decided to support this project. The research institute of the DVGW, the Technologiezentrum Wasser (TZW) was responsible for running the project. Both, the TZW and the BfS together developed a questionnaire. At the BfS, the determination of naturally occurring radionuclides on samples of water work residues and the dose assessments were performed.

This presentation shows the results and the experiences of this joint project between a private organized association and the BfS in the sensitive field of natural radiation.