KOMPETENZZENTRUM WasserBerlin



Separate Collection of Iodinated X-ray Contrast Media in Hospitals

lodinated x-ray contrast media are almost completely unmetabolized emitted in the patients' urine into the Berlin wastewater system to 50 % from medical practices. These polar, very hydrophilic and hardly biodegradable substances reach via wastewater treatment plants the water bodies in which they have already been detected.

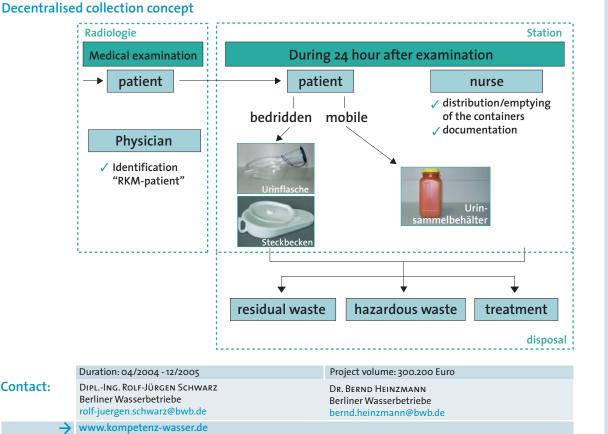
In order to collect and eliminate separately the urine containing x-ray contrast media in hospitals, three concepts have been developed in the scope of this R&D project:

- Centralized collection concept with a no-mix toilet in the radiology ward;
- Decentralized collection concept featuring a no-mix toilet for every of the ward;
- Decentralized collection concept with mobile urine containers for the wards.

Their evaluation systematically has taken into consideration costs, acceptance and a value benefit analysis using the following criteria:

- Integration into the existing sanitation system and waiting rooms;
- Supplementary need for assistance;
- Integration into the medical plan of the radiology department and the wards;
- Quality of patients' treatment, absolute and relative collected quantity.

The feasibility study has shown that a separated collection of iodinated x-ray contrast media in hospitals is possible through the implementation of a decentralized urine collection concept using mobile urine containers. This decentralized collection concept will undergo a test and demonstration phase.



Project Partners





