NORM waste Handling on Jõelähtme landfill

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Tallinn Waste Recycling Center is a waste management company owned by the city of Tallinn. It started operation in 2003, at present the company has 86 employees. The main activities of Tallinn Waste Recycling Center are waste transport, waste fuel production, bio-waste composting, bottom ash handling and aging and landfilling.

Since august 2019, Tallinn Waste Recycling Center is the first and only waste management company in Estonia having a permit for NORM waste handling. The NORM waste is taken to the Jõelähtme landfill situated about 20 km east from Tallinn. It covers 67 hectares and serves more than 500 000 people in western and northern Estonia, including the West-Virumaa county.

Preparations to receive the permit for NORM waste handling took two years. Preparatory work by Tallinn Waste Recycling Center included the following:

- Radiation safety assessment for the disposal of filter material from water treatment industry contaminated with radium-226, radium-228 and thorium-228 on Jõelähtme landfill.
- Formulation of NORM waste management procedures on the landfill and purchase of measuring instruments for monitoring the work.
- Training for workers.
- Observation of radium and thorium background in the leachate water of the landfill, monitoring will continue throughout the operation of the landfill.

The first load of NORM waste reached Jõelähtme landfill in January 2020. 40 tonnes of NORM waste from the Viimsi Water Ltd. water treatment plant was put into a pit and covered with mixed municipal waste. The area on the landfill was marked with a radioactivity hazard sign. Doses to workers stayed well below a micro-Sievert as the operation time was very short.