

WASTE COMBUSTION OF ORGANIC NORM

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Abstract

For naturally occurring radioactive material (NORM) with high calorific value (> 6.000 kJ/kg), as for example uranium-bearing anion exchange resins (AER), disposal routes are restricted to incineration or recycling. To assess the radiation exposure of workers at the combustion plant and the populace in the immediate neighbourhood a calculation procedure was compiled, comprising incineration of AER with 200 Bq/g U-238 under regular conditions. In addition, the impact of a system malfunction at the combustion plant was calculated by atmospheric dispersion modelling and subsequent exposure evaluation. Radiation exposures were well below the reference value of 1 mSv/a.