

(4) Ethics of radioactive waste management: what are our responsibilities protecting today and tomorrow?

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Abstract—Nuclear technology has created great benefits, but it has also given rise to many new and significant risks, including the risks associated with radioactive waste management. When evaluating those risks in policy-making, there is a tendency to focus on the *social* or *public acceptance*, emphasizing that the radioactive waste management option must be accepted by the public. I will argue that concentrating solely on social acceptance threatens to obscure several important ethical issues of radioactive waste management. Following the notions of ‘good governance of risky technology’, *good* radioactive waste management needs to involve both social acceptance and *ethical acceptability*, because it is only in conjunction that these two concepts gain serious relevance for policy-making. Conceptually, it is helpful to combine these notions, because they are mostly complementary; social acceptance studies are often in need of an ethical addendum, while existing ethical analysis would very much benefit from including stakeholders’ opinions. In this talk, I will first present six reasons why a sole focus on social acceptance would not sufficiently capture the relevant ethical issues of radioactive waste management. More specifically, I will discuss the problems that acceptance could be based on (i) incomplete information or (ii) for the (ethically) wrong reasons. Moreover, the question remains unanswered (iii) whose acceptance we should be striving for. The latter problem could be exacerbated when dealing with (iv) international and (v) intergenerational risks. The question of (vi) distribution of risks and benefits also typically remains unanswered in risk acceptance studies. The first three problems could best be categorized under the heading of *procedural justice* while the latter three fall best under the heading of *distributive justice*. Following the literature on *nuclear ethics*, *energy justice*, as well as a forthcoming publication of ICRP that has identified justice as one of the four core values of the system of radiological protection, I argue that ethically acceptable radioactive waste management should at least account for issues of procedural and distributive justice; both justice notion have a spatial and a temporal dimensions, relating to space and time respectively. The ethical intricacy of this issue is that different requirement of justice might be potentially conflicting. For instance, complying with our obligations to protect future generations could create additional burdens for the present generations (as a whole). Moreover, it could create an instance of (spatial) injustice among the currently living generations. Ethically acceptable radioactive waste management should sufficiently account for these potentially conflicting situations.