



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

Summary of the environmental report for the national programme on the management of spent nuclear fuel and radioactive waste

In connection with the preparation of the national programme for the management of spent fuel and radioactive waste, an environmental impact assessment of the programme was carried out in accordance with the Act on Environmental Impact Assessments of Public Authorities' Plans and Programmes (200/2005).

The environmental impact assessment focused especially on the environmental impacts of the national programme's objectives and development areas. The focus of the impact assessment was on the impacts of achieving or not achieving the objectives, especially at the level of society. In the case of some impacts, the analysis extends to the impacts within an operator's environment.

The reform of the Nuclear Energy Act proposed in the national programme has no direct impact on the living environment, natural environment, community structure or natural resources. The impact of the reform is predominantly administrative. However, the predictability generated by the legislative reform for operators creates an opportunity to proactively develop operations, so they are more efficient and safe, which is likely to have a positive impact on the environmental impacts of the operations in the long term.

Similarly, the specification of requirements and responsibilities related to the closure of final disposal facilities proposed in the national programme will make it possible for operators to better prepare for the future and thus, plan the necessary measures to prevent or reduce impacts on the natural and living environment. The proposed development of a waste management accounting process will not have a direct impact on the living environment, natural environment, community structure or natural resources either. Instead, the impact will be administrative.

The impact assessment found that the utilisation of existing or planned nuclear facilities was a socially sustainable, safe and cost-effective solution for the treatment and final disposal of radioactive waste generated in Finland in activities other than in its own activities. The amount of radioactive waste generated elsewhere received by nuclear facilities is small in proportion to the amount of waste generated by the nuclear plant in its own operations. Thus, the reception of waste does not significantly increase impacts on the natural or living environment at the facility's site.

A more detailed environmental impact assessment is needed for the proposed treatment of waste exempt from supervision in waste incineration plants. In particular, it is necessary to examine how waste exempt from supervision reacts to the incineration process and what technical and radiation protection solutions must be taken into account. The treatment of waste exempt from supervision in waste incineration plants would support the principle of the Waste Act, according to which the use of waste as energy is preferable to its final disposal in landfills. This would also reduce the amount of waste that ends up in landfills and thus the environmental impacts of landfills for example on the natural environment and groundwater. In the context of the assessment, it was recommended that a report be prepared on the suitability of waste exempt from supervision for treatment at incineration plants, its possible environmental impacts, and the

means of mitigating potential harm. It was also proposed that the permit procedure for incineration plants be reviewed in more detail with regard to the treatment of waste exempt from supervision.

The maintenance of national competence and training were not found to have a direct impact on the living environment, natural environment, community structure or natural resources. However, education can ensure the improved competence of the operator and the authorities. Increasing competence can lead to technological development, which in turn can create preconditions for preventing or reducing environmental impacts.

The identified environmental impacts related to the national programme will be examined in more detail once the objectives of the national programme have been achieved and in possible separate environmental impact assessment procedures by operators.