

Developing transport container for category 1 source

The first decommissioning project of a disused Category 1 radioactive source, previously applied for medical purposes at the Medical Center Kladovo, was successfully carried out by PC NFS. According to national and international regulations, the transport of a Category 1 source must strictly comply with requirements regarding radiation protection, security, and overall safety.

One of the essential project requirements was to ensure that the source, during removal and transport, remained within its shielding, which provided compliance with radiation dose criteria. Nevertheless, because of additional safety and security considerations, it was necessary to design and apply a specialized transport container. This container was developed, engineered, and manufactured by PC NFS, representing an innovative technical solution tailored to this demanding task.

The realization of this task included a complex multidisciplinary process requiring precise planning, technical expertise, organizational coordination, and strong project management. This paper describes all phases of the development, including the preparatory phase, design and load simulations for the transport container, manufacturing of the container, disassembly of source and its placement within the protective transport container.

Country or International Organization

Instructions

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Track Classification: Track 2 Safety and Security by Design - Regulatory and Industry Perspective