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Publicações Recentes

Versão em papel disponível para consulta na Bíblioteca



International Evaluation of Neutron Cross-Section Standards

Cross-section standards need to be of high quality and accuracy to form the foundation of a wide range of important nuclear measurements and evaluations for both energy and non-energy applications. They constitute the yardstick for all other nuclear physics measurements. These standards have been re-assessed and evaluated to make significant improvements in the data, and to take into account important new experimental data and improved evaluation techniques. The methods employed were the most sophisticated ever used in cross-section evaluations. These present standards are more accurate than all earlier versions, and the given errors are well justified in the context of contemporary data and evaluation methodology.

STI/PUB/1291, 227 pp.; 0 figures; 2007, ISBN 92-0-100807-4.

Subject Classification: 0306 - Nuclear data.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1291_web.pdf



Identification of Radioactive Sources and Devices

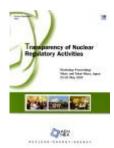
IAEA Nuclear Security Series No. 5

This manual has been produced as part of the IAEA's Action Plan for the Safety of Radiation Sources and Security of Radioactive Material. It is intended to: assist in the recognition and identification of objects thought to be radioactive devices, sources and transport packages; provide instruction on what to do and how to obtain further help; enhance awareness of the existence of radioactive devices, sources and transport packages; and provide information on the International Catalogue of Sealed Radioactive Sources and Devices through regulatory authorities in IAEA Member States. It will also help in identifying sources for events that are reported for inclusion in the IAEA's Illicit Trafficking Database.

STI/PUB/1278, 138 pp.; 148 figures; 2007, ISBN 92-0-111406-0, English.

Subject Classification: 0605 - Radiation sources and accelerators; 1400 - Physical protection of radioactive material.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1278_web.pdf



Transparency of Nuclear Regulatory Activities

Workshop Proceedings, Tokyo and Tokai-Mura, Japan, 22-24 May 2007, Language: English, Published: 16-NOV-07, 316 pages.

NEA#06256, ISBN: 978-92-64-04095-3.

Synopsis

One of the main missions of nuclear regulators is to protect the public, and this cannot be completely achieved without public confidence. The more a regulatory process is transparent, the more such confidence will grow. Despite important cultural differences across countries, a number of common features characterise media and public expectations regarding any activity with an associated risk.

A common understanding of transparency and main stakeholders' expectations in the field of nuclear safety were identified during this workshop, together with a number of conditions and practices aimed at improving the transparency of nuclear regulatory activities. These conditions and practices are described herein, and will be of particular interest to all those working in the nuclear regulatory field. Their implementation may, however, differ from one country to another depending on national context.

Todas as publicações aqui referenciadas encontram-se disponíveis para consulta na Biblioteca

12 Dezembro 2007



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Engineered Barrier Systems (EBS) in the Safety Case: Design Confirmation and Demonstration

Workshop Proceedings, Tokyo, Japan, 12-15 September 2006 Language: English , Published: 21-NOV-07, 150 pages.

NEA#06257, ISBN: 978-92-64-03995-7

Synopsis

The presence of several barriers serving complementary safety functions enhances confidence that radioactive waste placed in deep geological repositories will be adequately isolated and contained to protect human health and the environment. The barriers include the natural geological barrier and the engineered barrier system (EBS). The EBS itself may comprise a variety of sub-systems or components, such as the waste form, container, buffer, backfill, seals and plugs. Given the importance of this subject, the Integration Group for the Safety Case (IGSC) of the OECD Nuclear Energy Agency (NEA) sponsored a series of workshops with the European Commission to develop greater understanding of how to achieve the necessary integration for the successful design, testing, modelling and performance assessment of EBS for deep underground disposal of radioactive waste.

These proceedings present the main findings from, and the papers delivered at, the fourth NEA-EC workshop on EBS, which took place in Tokyo, Japan, in September 2006. This final workshop of the series focused on strategies and methods to demonstrate that EBS designs will fulfil the relevant requirements for long-term safety, engineering feasibility and quality assurance. The workshop highlighted that large-scale experiments have confirmed the feasibility of techniques for manufacturing and installing engineered components in disposal systems and have also provided valuable lessons to improve designs and refine practical aspects to construct and implement EBS.