



**Savannah River
National Laboratory™**

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We put science to work.™

Examples of International Activities

Roger Seitz

Waste Management 2015

SRNL-MS-2015-00042

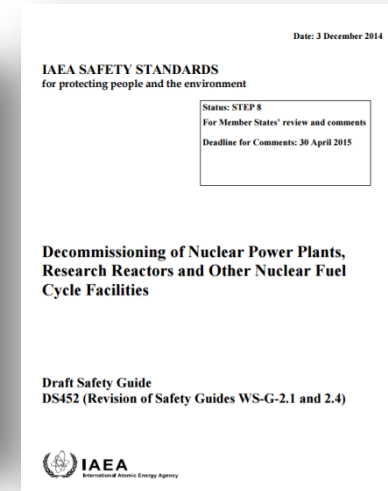
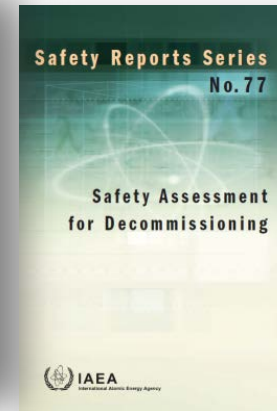
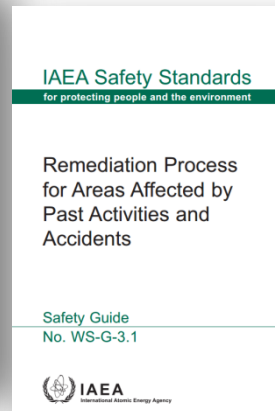
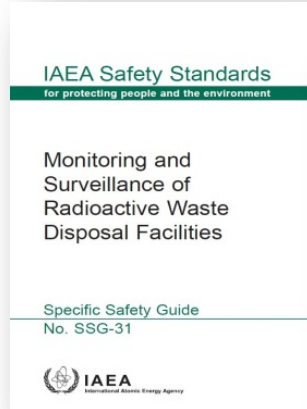
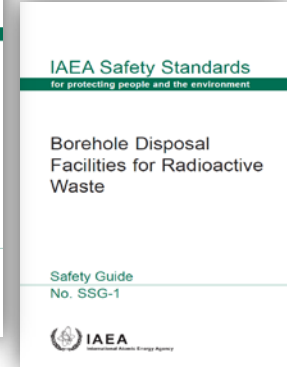
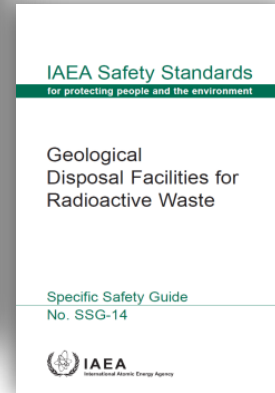
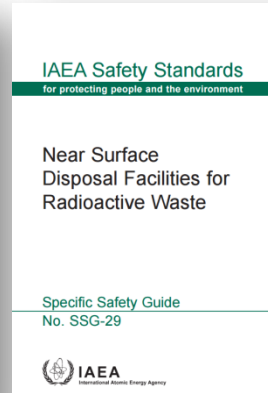
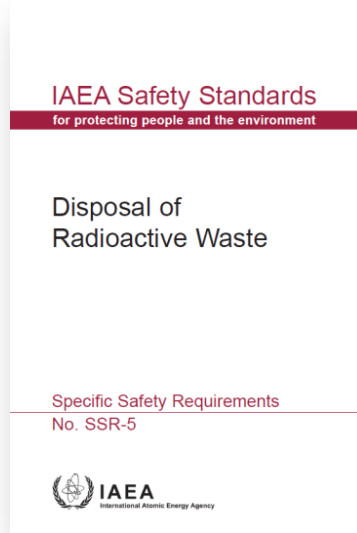
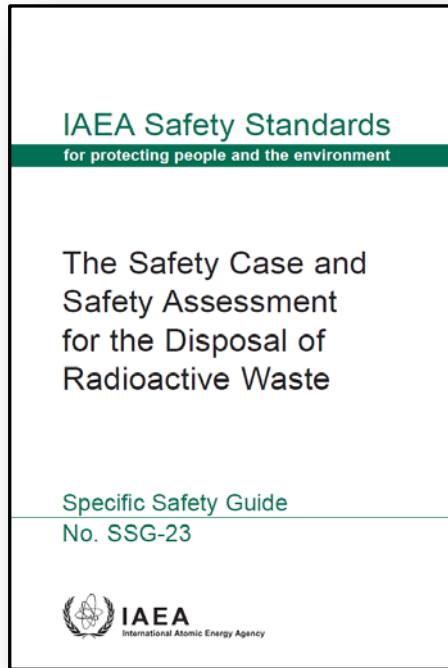
Introduction

Brief overview of assessment related activities from international organizations

- *International Atomic Energy Agency*
- *European Commission*
- *OECD/Nuclear Energy Agency*



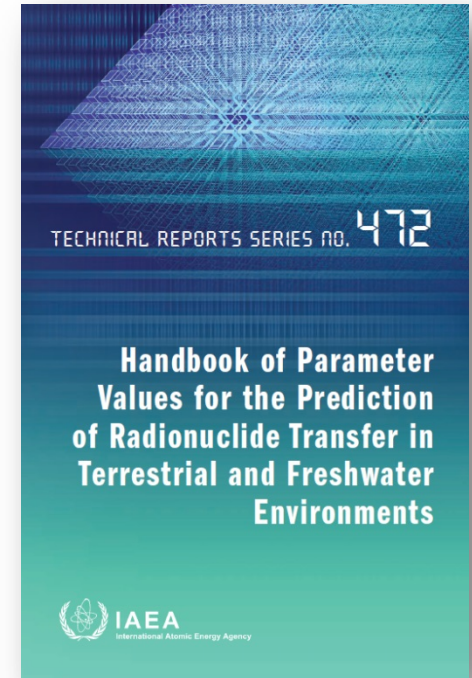
IAEA Waste Safety Section – Safety Standards



www-ns.iaea.org/standards/

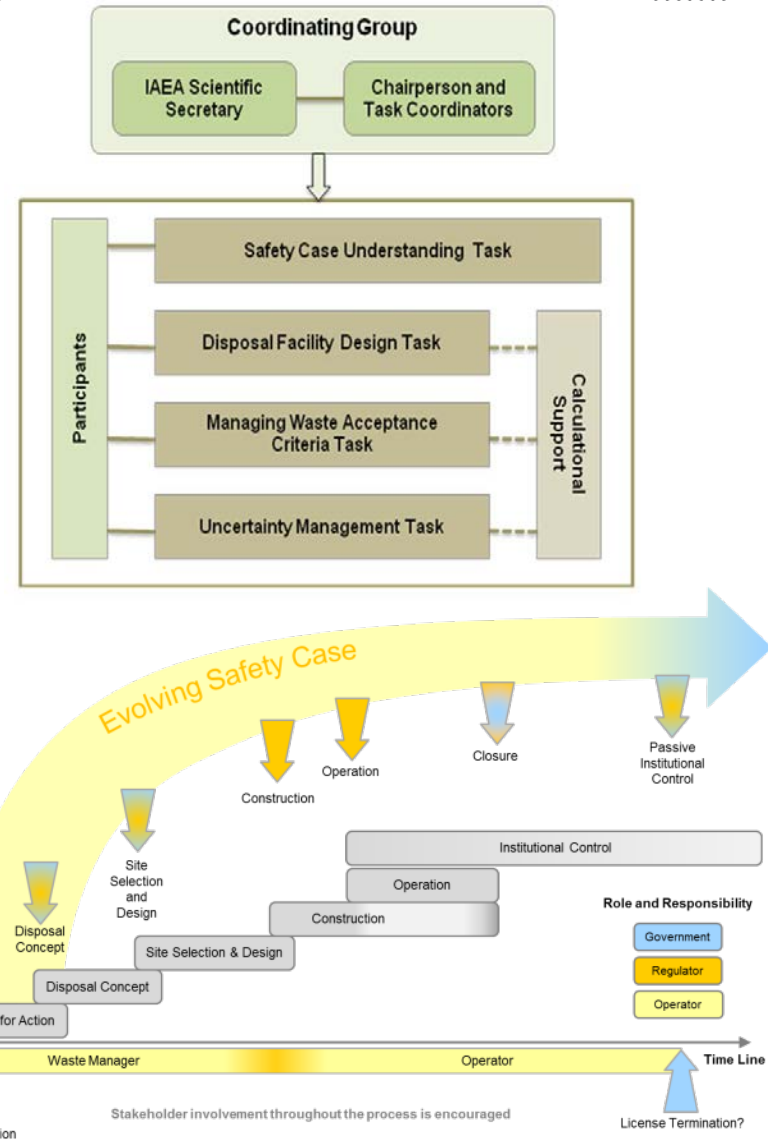
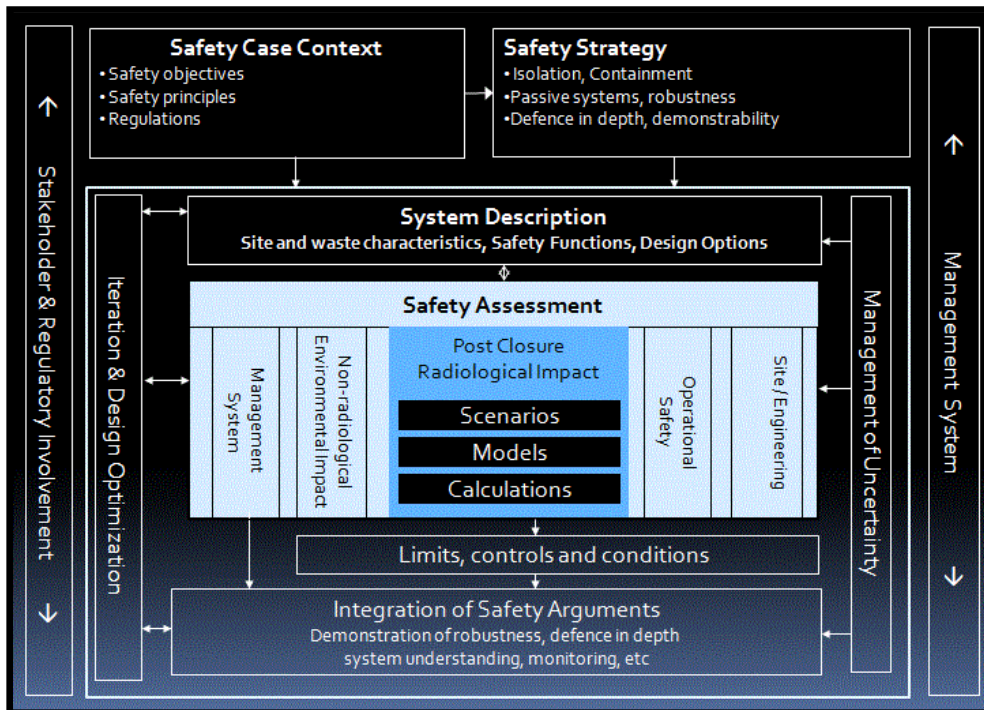
Other IAEA Activities

- MODARIA – Modelling and Data for Radiological Impact Assessments (previously VAMP, BIOMOVs, BIOMASS, EMRAS, EMRAS II) – multiple topical areas
- CIDER – Global Constraints to Implementing Decommissioning and Environmental Restoration Projects
- DRiMa – Decommissioning Risk Management
- GEOSAF II – Emphasis on harmonizing operational and long-term safety considerations
- Waste Management following an Accident
- Fukushima Comprehensive Report
- DISPONET, ENVIRONET, International Decommissioning Network



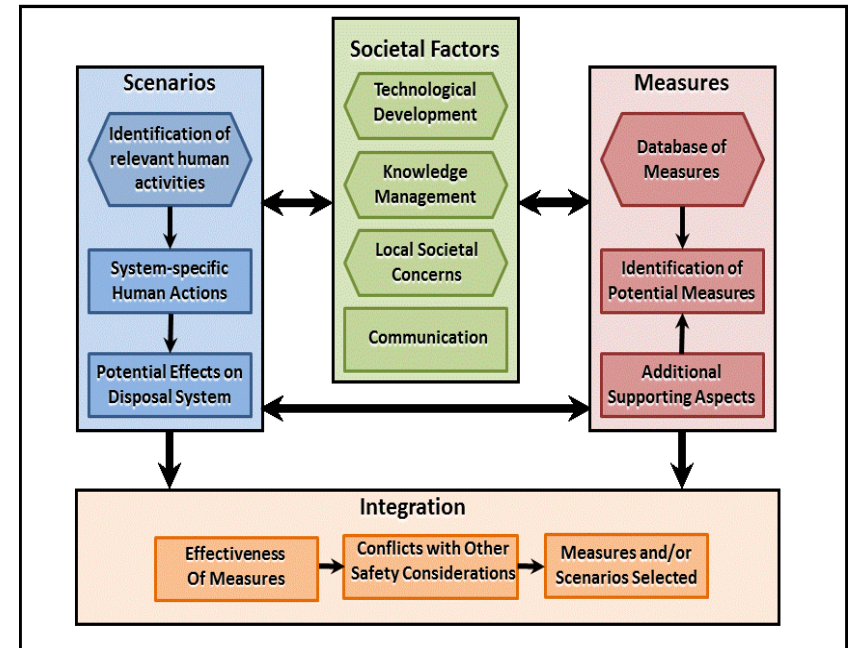
PRISM Project

- PRISM project addressed the role of the safety case throughout the lifecycle of a disposal facility
- Provides basis for training courses
- PRISMA – follow-on to focus on application of PRISM tools to assist with decision making and safety case development



HIDRA

- Human Intrusion in the context of Disposal of RadioActive Waste
- Last Plenary in December 2014
- Final draft report is being prepared, meeting next week
- Objectives:
 - *Role of intrusion in context of Safety Case*
 - *General process to consider intrusion*
 - *Communication strategies*
- Linked to decision-making and the safety case (e.g., PRISM)



HIDRA – Key Messages

- Intrusion is considered for radioactive waste to increase the robustness of a disposal system and not intended to be a “yes or no” indicator of compliance (optimization concept)
- Contributes to decision-making for design, operations, etc.
- Not predicting effects, stylized scenarios based on current habits
- Identify measures to reduce potential for and consequences of intrusion
- Highlight inherent benefits of deep disposal
- Importance of effective communication – cautiousness, context regarding uncertainty
- Role of knowledge preservation, active engagement with local communities



OECD/NEA and European Commission

Integration Group for the Safety Case (NEA)

- Reports on Safety Case for Geologic Disposal – suggestions for indicators, scenarios, etc.

INTESC (EC)

- Project summarizing experiences with the safety case for geological disposal – suggestions for confidence building, alternative indicators, etc.

RK&M (NEA)

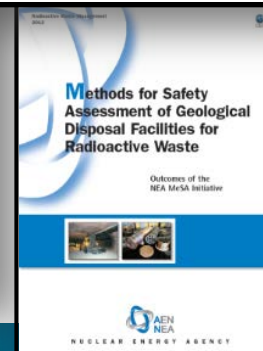
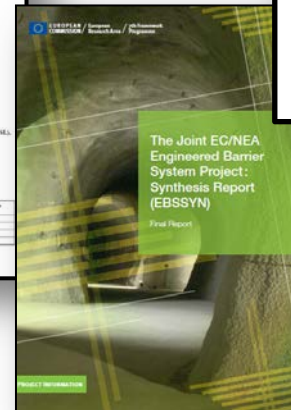
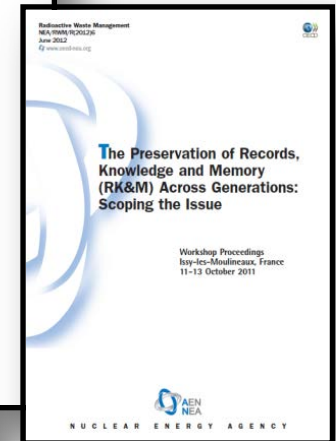
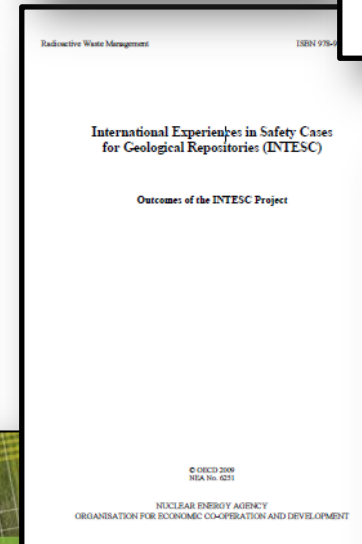
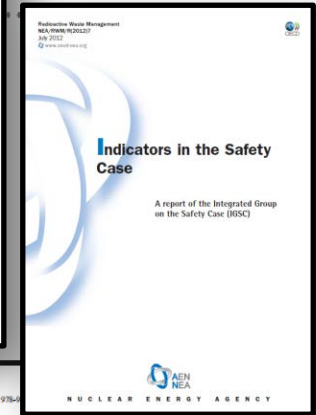
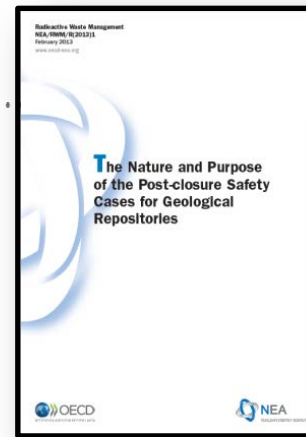
- Considerations related to records, knowledge and memory

Human Intrusion (NEA)

- Project to update FEPs

Other EC/NEA projects

- MeSA, EBSSYN, PAMINA



Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



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