Canadian Nuclear Safety Commission
Commission canadienne de sûreté nucléaire

Potential Impact of Public Perception on the Transport of Radioactive Material

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The Past 50 years

- Millions of shipments completed safely and securely annually
- Packages designed by engineers, reviewed by engineers
- Approvals based on science
- Effective regulatory framework

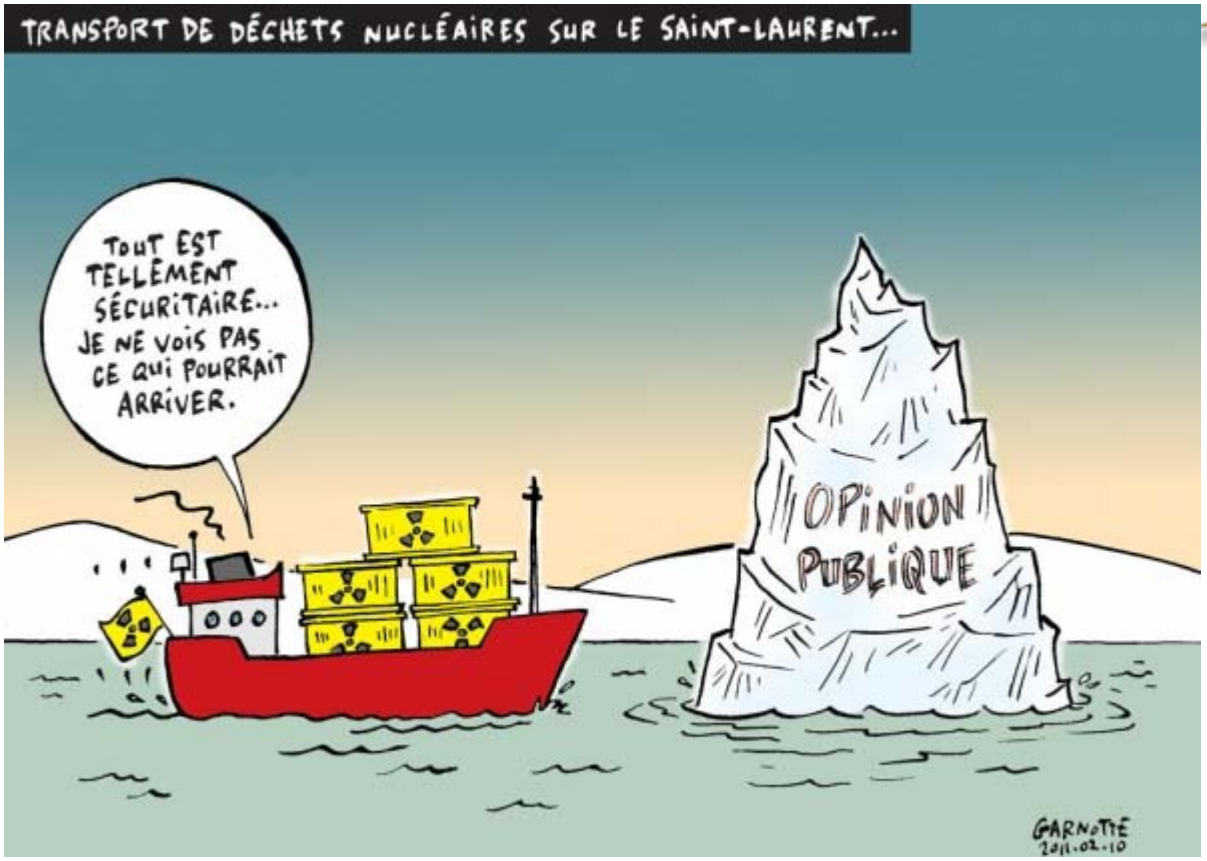
SAFE Transport of RAM largely unnoticed by public

The Changing Public

- Information is more available and accessible
- Better access to information does not equal better understanding of the issue
- Not all information available to the public is accurate, correct or unbiased

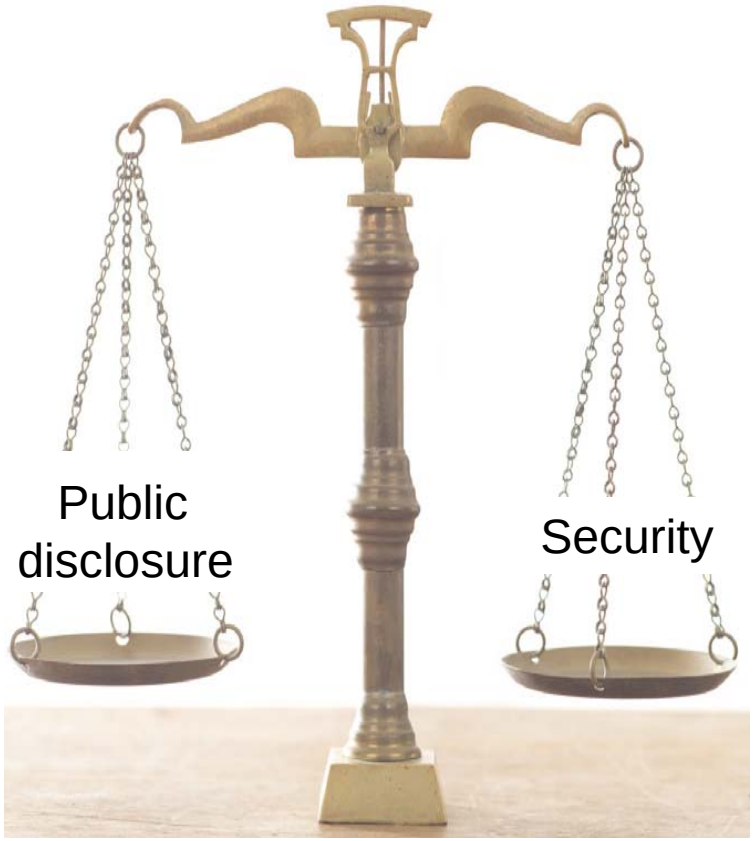
Nuclear often portrayed and perceived as dangerous

Public Perception



“It’s so safe… I don’t see what could go wrong.”

Information vs. Security

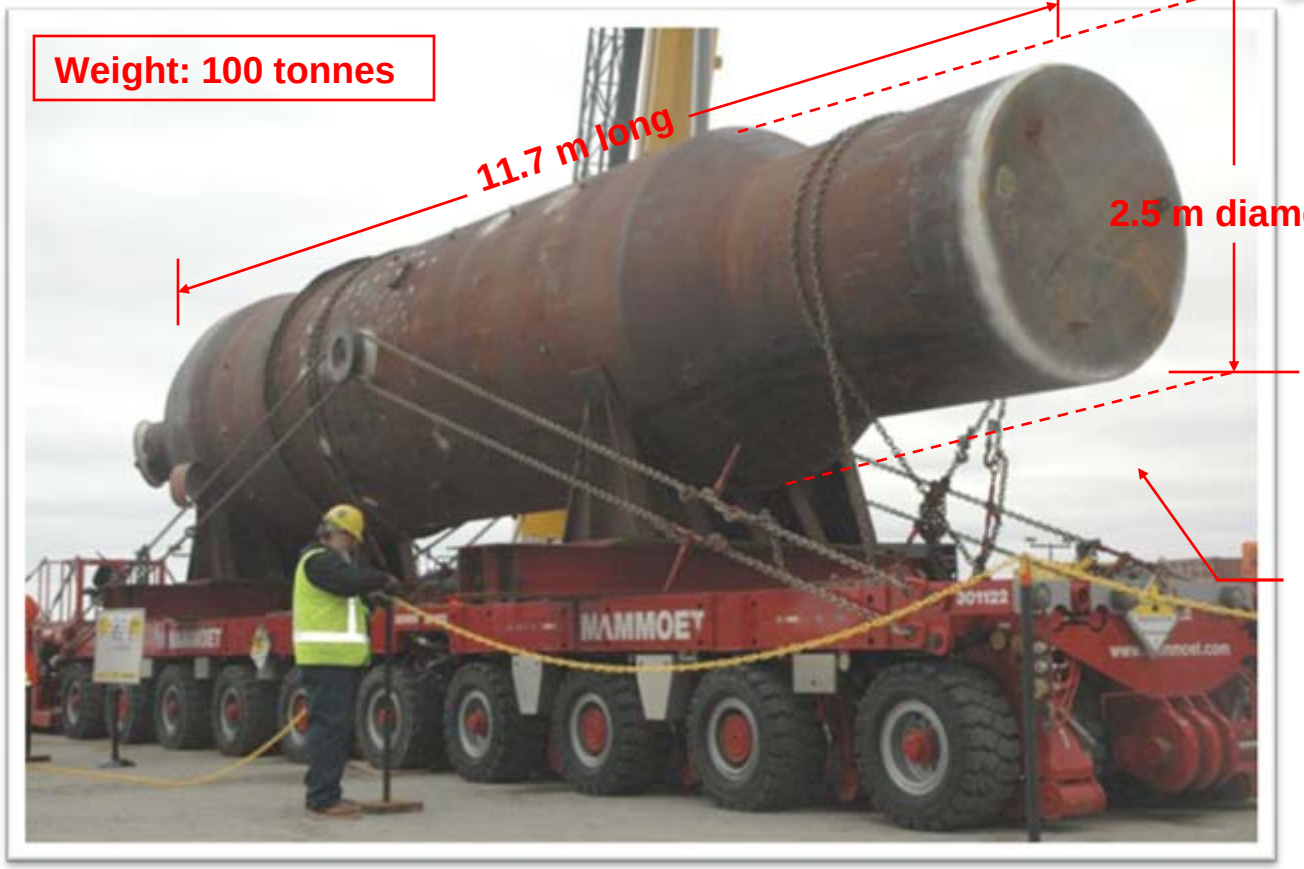


- Public wants specific details about shipments (what, where, when, how)
- Information often restricted to protect the public and national/international security
- Canadian Regulations prohibit disclosure of shipment details for nuclear material

Case Study #1: Steam Generators

- Transport of large components (SCO-I) under Special Arrangement
- High media and public interest
- 77 intervenors participated in CNSC public hearing (Sept. 2010)
- Little or no information originally available from official sources

Case Study #1: Steam Generators



Case Study #1: Factors that were evaluated

A team of specialists evaluated the following areas:

- Nuclear substances
- Environmental impacts
- Radiation protection
- Safety measures
- Emergency management
- Transport regulations

Case Study 1: What did CNSC conclude?

- The proposed package configuration with respect to SCO-I material and Type IP-I packages meets regulatory requirements
- The proposed shipment complies with the *Nuclear Safety and Control Act* and the *Packaging and Transport of Nuclear Substances* Regulations
- The overall level of safety in transport meets or exceeds all the applicable requirements

Case Study 1: Lessons Learned

- Perception of risk affected by the size of the components to be transported
- Special Arrangement:
  - Use of the word “Special” give the impression of circumventing the Regulations
  - Perception of a lesser level of safety
- Canada leading work to develop regulatory material on:
  - Special Arrangements
  - Transport of Large Components

Case Study #2: Uranium Concentrate Spill

- Incident at sea with shipment of LSA-I in Industrial Type Packages
- All material contained in cargo hold
- CNSC transparency by providing information to the public
- Incident details presented in public domain to the Commission in January 2011

Case Study #2: Uranium Concentrate Spill

No contamination outside of cargo hold and low level of radiation on surface of cargo hold

There was no risk to the crew, the public and the environment resulting from this incident

Conclusions

- Public wants information on the transport of RAM
- Competent authorities have a responsibility to provide timely and factual information to the public
- The public's right to know cannot compromise security

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