


**General Training On Methodologies For Geological Disposal in North America**  
 IAEA Network of Centers of Excellence





**Development of RAD Waste & SNF Management in Russian Federation**

Artiom POPOV  
 FSUE LI VNIPIET  
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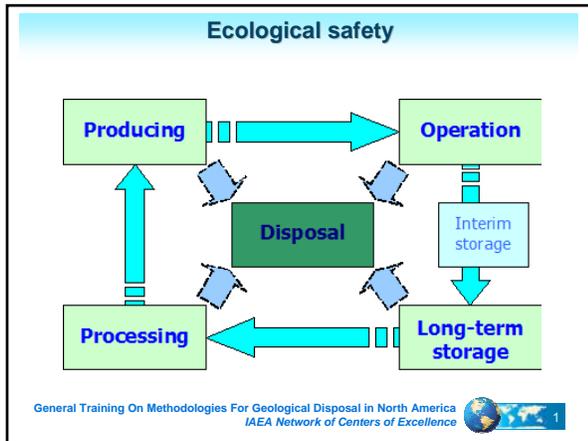
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**Legislative background**

President of Russian Federation  
 Vladimir V. Putin  
 04 December 2003  
 № 2196

**BASES**  
 Of state policy in area of  
 nuclear & radioactive safety in Russian Federation  
 For the period till 2010 &  
 further perspective

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### Legislative background

#### General purpose of state policy

- V.10.7 – ... inventory of **all** nuclear & radiation hazard objects and materials ...
- V.13.2 – ... provide optimum rates of processing of **all** ionization radiation materials types ...
- V.13.4 – ... provide recycling of potentially useful components ...
- V.13.4 – ... disposal of radiation materials which unsuitable for further use ...

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### Concept background

The safety of **any nuclear facilities** should be assured over the period of their operation, including decommissioning.

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### Total activity of radiation materials stored in RF

As of 01.01.2004 (Bq)

Types	Total	Liquid	Solid
Total (100%)	$5,96 \cdot 10^{19}$	$4,6 \cdot 10^{19}$	$1,36 \cdot 10^{19}$
at ROSATOM enterprises (99%)	$5,9 \cdot 10^{19}$	$4,6 \cdot 10^{19}$	$1,3 \cdot 10^{19}$
at other enterprises (1%)	$6,3 \cdot 10^{17}$	$1,0 \cdot 10^{14}$	$6,3 \cdot 10^{17}$

National system of RAD waste & SNF management should be created on the basis of Rosatom enterprises

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### Concept background

- **Federal level** – HLW & SNF disposal centers
- **Regional level** – RW management centers

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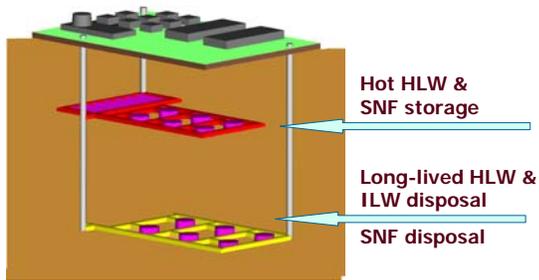
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### Federal HLW & SNF disposal



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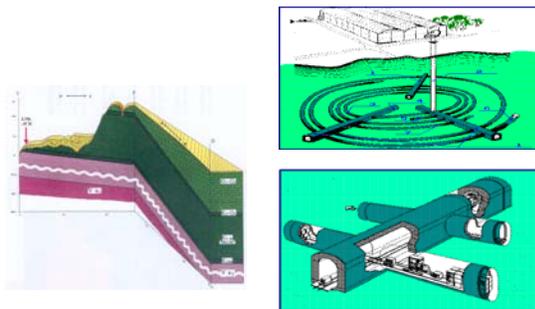
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### Regional RW storage facility



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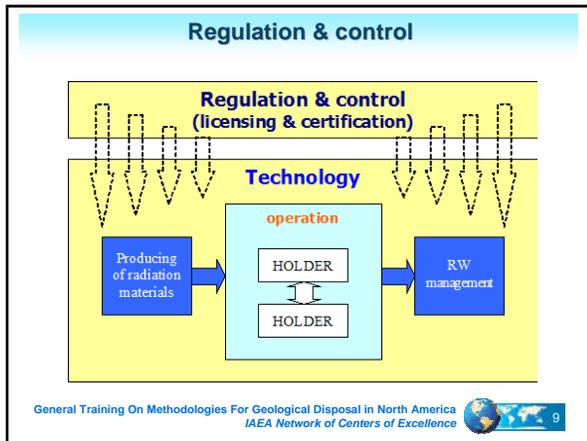
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- ### Completed works
- **Ecological** assessment
  - Scientific & geological **research**
  - **Methodology** of different RW types processing
  - Technologies & **concepts** for RW final isolation by different methods
  - Pilot & industrial **facilities** for RW treatment & conditioning
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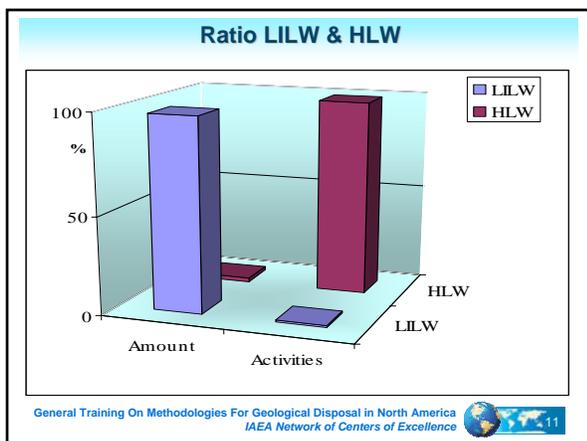
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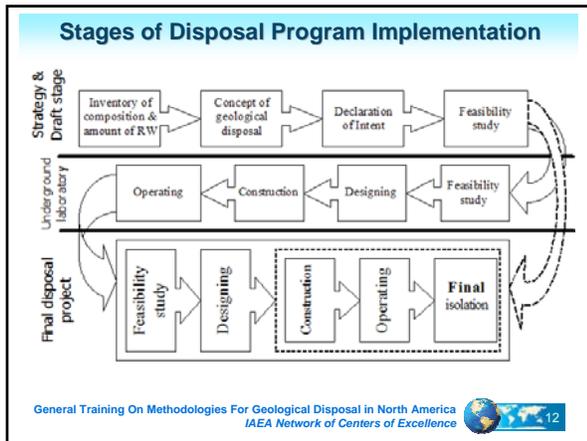
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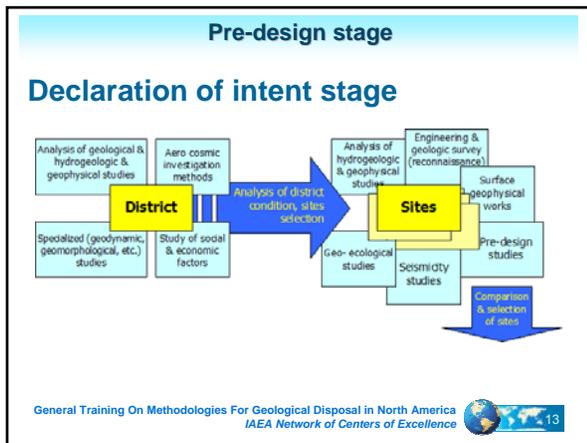
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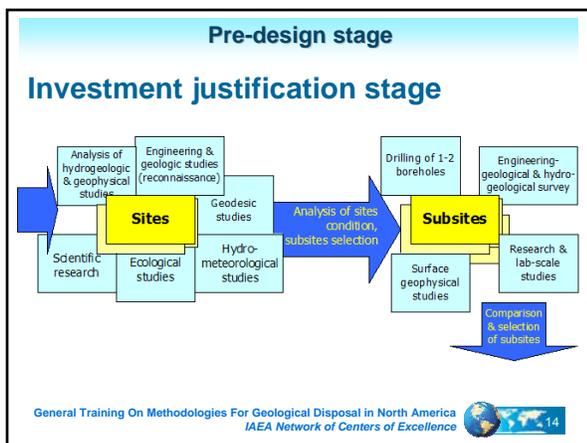
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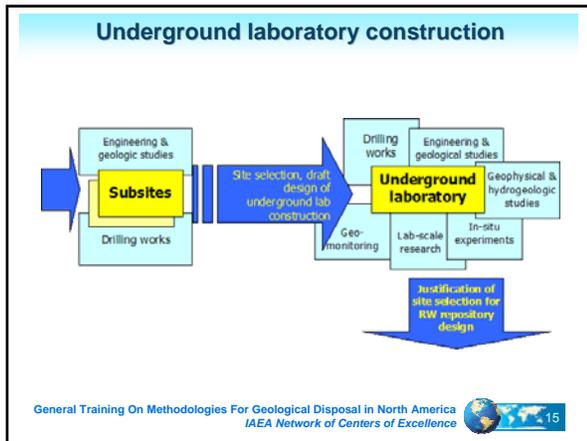
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### Resume

Prerequisite for further development of RW management system:

- .....
- Wide scientific basis
- Experience of RW handling
- Treatment & conditioning facilities
- Possibility of centralized coordination
- .....

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