

Rethinking Nuclear Waste

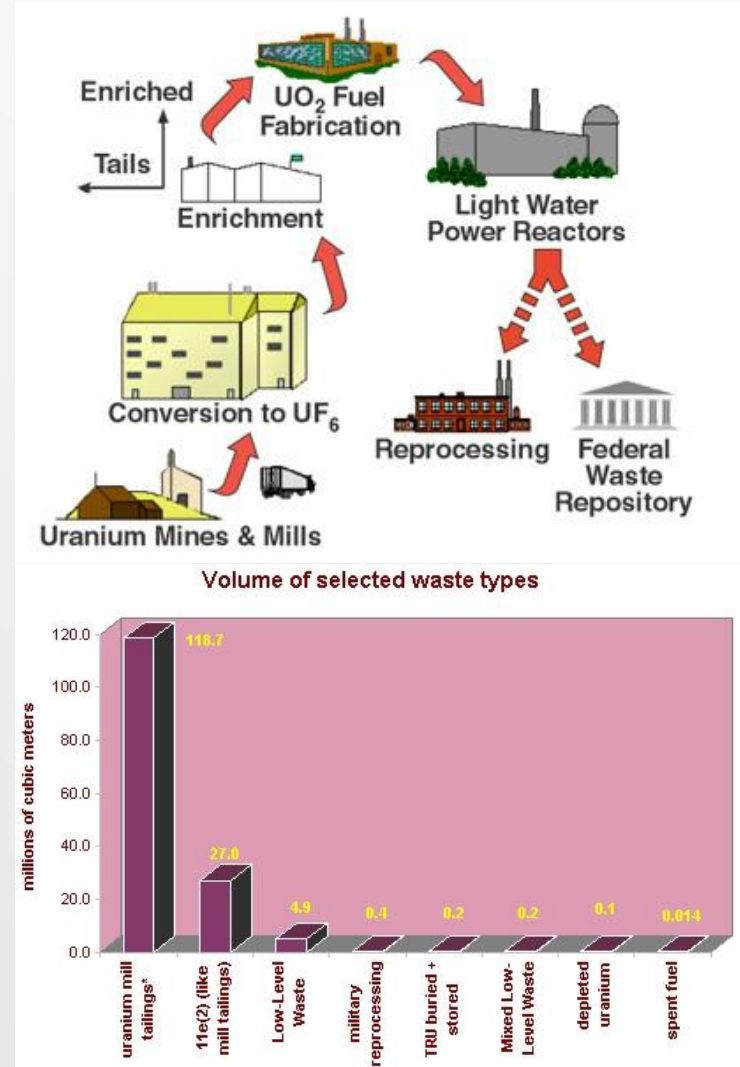
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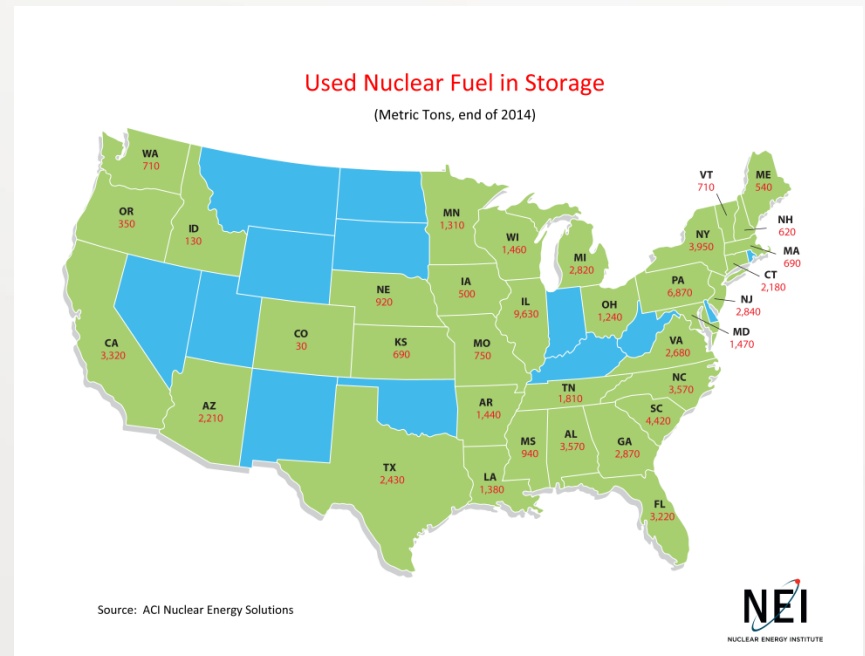
Radioactive Waste

- Radioactive waste generally falls into four categories:
 - Low-level waste (LLW)
 - Waste incidental to reprocessing (WIR)
 - High level waste (HLW)
 - Uranium mill tailings



How Much Radioactive Waste?

- Over the past four decades, the entire industry has produced 74,258 metric tons of used nuclear fuel. If used fuel assemblies were stacked end-to-end and side-by-side, this would cover a football field about eight yards deep.



Waste Comparison

kg per 1,000 MWe year

Pollutant	Hard coal	Brown coal	Fuel oil	Other oil	Natural Gas	Nuclear Power
CO ₂ (g/GJ)	2.99E+09	3.19E+09	2.44E+09	2.34E+09	1.77E+09	
SO ₂ (g/GJ)	2.41E+07	4.29E+07	4.26E+07	7.20E+06	2.15E+04	
NO _x (g/GJ)	9.21E+06	5.78E+06	6.15E+06	4.07E+06	2.94E+06	
CO (g/GJ)	2.81E+06	2.81E+06	4.95E+05	4.95E+05	4.58E+05	
Non methane organic compounds (g/GJ)	1.55E+05	2.46E+05	1.17E+05	1.02E+05	4.99E+04	
Particulate matter (g/GJ)	3.80E+07	1.03E+08	5.05E+05	6.03E+04	3.16E+03	
Flue gas volume total (m ³ /GJ)	1.14E+07	1.40E+07	8.80E+06	8.71E+06	8.58E+06	
High Level Waste						2.00E+04
Total	3.07E+09	3.36E+09	2.50E+09	2.36E+09	1.78E+09	2.00E+04

