

Table 2-11. Comparison of the potential environmental impacts of the alternatives for other aluminum-clad fuel and targets.^a

Factors	Alternatives						
	Continuing Storage	Processing to Metal	Processing to Oxide	Blending Down to Low Enriched Uranium	Processing and Storage for Vitrification (DWPF)	Vitrification (F-Canyon)	Improving Storage
Health effects of Normal Operations							
Radiological health effects (10-year totals):							
Population latent cancer fatalities	0.000005	NA ^b	NA	NA	0.0034	NA	0.000005
Worker latent cancer fatalities	0.00084	NA	NA	NA	0.0018	NA	0.00084
Health effects from facility accidents^c (projected latent cancer fatalities)	0.0089	NA	NA	NA	4.1	NA	0.0089
Health effects from transportation (projected latent cancer fatalities)							
Incident-free (involved worker)	0.00105 ^d	NA	NA	NA	0.000746	NA	0.00106
Accidents (offsite population) ^e	2.0	NA	NA	NA	2.0	NA	2.0
Air resources							
Nonradiological - Nitrogen oxide incremental concentration at SRS boundary (highest annual, micrograms per cubic meter)	0	NA	NA	NA	0.083	NA	0
Water resources							
Lead (micrograms per liter) in Upper Three Runs Creek	0	NA	NA	NA	3	NA	0
Utilities (10-year totals)							
Electricity usage (megawatt-hour)	10	NA	NA	NA	5,901	NA	10
Waste management (10-year totals)							
High-level liquid waste generation (million liters)	0.14	NA	NA	NA	0.59	NA	0.14
Equivalent DWPF canisters	0	NA	NA	NA	5	NA	0
Saltstone generation (cubic meters)	390	NA	NA	NA	1,600	NA	390
Transuranic waste generation (cubic meters)	0	NA	NA	NA	0	NA	0
Hazardous/mixed waste generation (cubic meters)	10	NA	NA	NA	4	NA	10
Low-level radioactive waste generation (cubic meters)	4,200	NA	NA	NA	2,300	NA	4,200

a. Includes transportation of associated radioactive waste.

- b. NA = Not applicable.
 - c. Assumes highly unlikely occurrence of maximum consequence accident.
 - d. Waste transportation only.
 - e. Maximum reasonably foreseeable latent cancer fatalities from medium probability accident based on the shipment of transuranic waste.
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