Table 2-4. Comparison of the potential environmental impacts of the alternatives for americium and curium.[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	0.00035	NA[b]	0.00027	NA	NA	0.00027	NA
Worker latent cancer fatalities	0.028	NA	0.026	NA	NA	0.026	NA
Health effects from facility accidents[c] (projected latent cancer fatalities)	3.1	NA	6.5	NA	NA	6.5	NA
Health effects from transportation (projected latent cancer fatalities)							
Incident-free (involved worker)	0.00195[d]	NA	0.00117[d]	NA	NA	0.00117	NA
Accidents (offsite population)[e]	2.0	NA	2.0	NA	NA	2.0	NA
Air resources							
Nonradiological - Nitrogen oxide incremental concentration at SRS boundary (highest annual, micrograms per cubic meter)	0.33	NA	0.33	NA	NA	0.33	NA
Water resources							
Lead (micrograms per liter) in Upper Three Runs Creek	6.1	NA	5.8	NA	NA	5.8	NA
Utilities (10-year totals)							
Electricity usage (megawatt-hour)	129,020	NA	66,993	NA	NA	66,993	NA
Waste management (10-year totals)							
High-level liquid waste generation (million liters)	1.3	NA	1.2	NA	NA	1.2	NA
Equivalent DWPF canisters	30	NA	27	NA	NA	27	NA
Saltstone generation (cubic meters)	3,400	NA	3,300	NA	NA	3,300	NA
Transuranic waste generation (cubic meters)	0	NA	0	NA	NA	0	NA
Hazardous/mixed waste generation (cubic meters)	0	NA	0	NA	NA	0	NA
Low-level radioactive waste generation (cubic meters)	6,500	NA	3,300	NA	NA	3,300	NA

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.