



SURPLUS PLUTONIUM DISPOSITION PROGRAM: SUMMARY OF KEY POTENTIAL ENVIRONMENTAL CONSEQUENCES

Resource Area	Preferred Alternative						No Action Alternative	
	Base Approach	SRS NPMP		All LANL	All SRS		SRS NPMP	LANL NPMP
		105-K	Modular		F-Area	K-Area		
Air Quality	<i>Construction</i>							
	LANL – Minor	LANL – Minor		LANL – Minor	LANL – No construction		LANL – No construction	LANL – No construction
	SRS – No construction	SRS – Minor		SRS – No construction	SRS – Minor		SRS – Minor	SRS – No construction
	<i>Operations</i>							
	LANL – None	LANL – None		LANL – Minimal	LANL – None		LANL – None	LANL – None
	SRS – Negligible HAPs	SRS – Negligible HAPs		SRS – None	SRS – Negligible HAPs		SRS – Negligible HAPs	SRS – Negligible HAPs
Ecological Resources	<i>Construction</i>							
	LANL – Potential impacts	LANL – Potential impacts		LANL – Potential impacts	LANL – No construction		LANL – None	LANL – None
	SRS – No construction	SRS – Negligible impacts		SRS – No construction	SRS – Impacts unlikely		SRS – None	SRS – None
	<i>Operations</i>							
	LANL – ESA consultation	LANL – ESA consultation		LANL – ESA consultation	LANL – None		LANL – None	LANL – None
	SRS – Negligible impacts	SRS – Negligible impacts		SRS – None	SRS – Impacts unlikely		SRS – None	SRS – None
Land Use – Construction (ac)	5.6	5.6	5.9	5.6	20	20	0	No construction
Human Health – Normal Operations (LCFs)	Workforce – 2 (2.4)	Workforce – 3 (2.9)	Workforce – 3 (2.5)	Workforce – 2 (1.8)	Workforce – 2 (2.4)	Workforce – 2 (2.4)	Workforce – 1 (0.8)	Workforce – 1 (0.8)
	Public – 0 (0.0001)	Public – 0 (0.0002)	Public – 0 (0.0002)	Public – 0 (0.0002)	Public – 0 (0.00008)	Public – 0 (0.00008)	Public – 0 (0.00002)	Public – 0 (0.00004)
Human Health – Bounding Accidents (Risk for non-involved worker and LCF for population)	Worker – 0.036	Worker – 0.036	Worker – 0.052	Worker – 0.036	Worker – 0.0039	Worker – 0.0033	Worker – 0.0033	Worker – 0.001
	Population – 0 (0.086)	Pop. – 0 (0.1)	Pop. – 1 (0.62) ^a	Pop. – 0 (0.086)	Pop. – 0 (0.14)	Pop. – 0 (0.1)	Pop. – 0 (0.1)	Pop. – 0 (0.028)
Socioeconomics (FTE in peak year)	<i>Construction Employment</i>							
	116	186	146	139	525	525	70	No construction
	<i>Operations Employment</i>							
	745	843	778	549	844	844	171	220
Waste Generation	<i>Operations CH-TRU Waste (diluted plutonium oxide and job control waste) m³</i>							
	3,600	3,800	3,800	3,100	3,500	3,500	480	510
Environmental Justice	No disproportionately high and/or adverse impacts on minority or low-income populations affected by activities at either the LANL or SRS sites are expected.							
Offsite Transportation - Operations Incident-Free Population Impact (LCFs)	0 (0.2)	0 (0.2)	0 (0.2)	0 (0.08)	0 (0.2)	0 (0.2)	0 (0.03-0.04)	0 (0.04-0.05)
Radiological Accident Impact (LCFs)	0 (0.0001)	0 (0.0001)	0 (0.0001)	0 (0.000001)	0 (0.00006)	0 (0.00006)	0 (0.00003 – 0.00005)	0 (0.00005 – 0.00007)
Traffic Facilities Risk	1 (0.6)	1 (0.6)	1 (0.6)	0 (0.3)	1 (0.6)	1 (0.6)	0 (0.1)	0 (0.1)

CH-TRU = contact-handled transuranic; ESA = Endangered Species Act; FTE = full time equivalent (employee); HAP = hazardous air pollutant; LANL = Los Alamos National Laboratory; LCF= latent cancer fatality (the number of LCFs in an exposed population); NA = not applicable; NNSA = National Nuclear Security Administration; NPMP = non-pit metal processing; PDP = pit disassembly and processing; Pop. = Population; SRS = Savannah River Site.

a. For Human Health accidents, the LCF for the population in the vicinity of LANL is 0 and for the population in the vicinity of SRS it is 1 for the modular option.

Notes:
 For Human Health Normal Operations, the LCFs to the workforce and public are split between LANL and SRS. The LCF value at any one site will be lower than the total LCF shown except for the All LANL and All SRS Sub-Alternatives and for the No Action Alternative when all activities occur at SRS.
 For Offsite Transportation, the rounded LCF value is provided, followed by the calculated value in parentheses.