

TABLE V-12

Summary of Exposure Risks for Alternative 1 - Storage of Waste as Sludge and Dump Salt Cake in Onsite Waste Tanks (Present SRP Waste Management Technique)

<i>Event</i>	<i>Maximum Individual Dose, rem</i>	<i>Population Dose for Maximum Year, man-rem</i>	<i>Probability, Events/year</i>	<i>Maximum Risk, man-rem/year</i>
Removal from Tanks	Not applicable	Not applicable	Not applicable	Not applicable
Processing	Not applicable	Not applicable	Not applicable	Not applicable
Transportation	Not applicable	Not applicable	Not applicable	Not applicable
<b>Storage</b>				
Routine Releases	Negligible	1.4	1.0	1.4
Spill during Transfer	$2.2 \times 10^{-2}$	$5.3 \times 10^2$	$5.0 \times 10^{-3}$	2.6
Explosion	7.8	$3.0 \times 10^4$	$1.0 \times 10^{-4}$	3.0
Sabotage by Dispersal	3.3	$2.3 \times 10^4$	$1.0 \times 10^{-5}$	$2.3 \times 10^{-1}$
Sabotage by Explosion	4.1	$9.8 \times 10^3$	$1.0 \times 10^{-5}$	$9.8 \times 10^{-2}$
Airplane Crash	4.1	$1.1 \times 10^4$	$1.0 \times 10^{-5}$	$1.1 \times 10^{-1}$
Abandonment	$3.9 \times 10^{-1}$	$2.7 \times 10^4$	$1.0 \times 10^{-5}$	$2.7 \times 10^{-1}$
Time-Integrated Risk, 300 years, man-rem <sup>a</sup>		$1.4 \times 10^3$		
Time-Integrated Risk, 10,000 years, man-rem		$2.3 \times 10^3$		
Risk with Abandonment after 100 years <sup>b</sup>		$2.4 \times 10^4$		

a. Integrated annual population risk, accounting for radioactive decay and population growth by a factor of 5.

b. Population risk integrated for 300 years, if tanks are assumed to be abandoned after 100 years, in accordance with proposed EPA criterion on duration of administrative control.