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consequersustime5.xls

Results based on NUREG-1465 (modified) Source Term

Case	Decay Time	Decay Time (years)	Mean Consequences (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
79a	30d	0.082192	4.43E-02	8.24E-02	2.37E+07
79b	90d	0.246575	4.19E-02	8.20E-02	2.25E+07
79c	1y	1	3.46E-02	8.49E-02	1.93E+07
79d	2y	2	2.57E-02	8.42E-02	1.69E+07
79e	5y	5	8.96E-03	7.08E-02	1.45E+07
79f	10y	10	4.68E-03	6.39E-02	1.34E+07
80a	30d	0.082192	2.01E-03	4.79E-03	1.35E+07
80b	90d	0.246575	1.87E-03	4.77E-03	1.29E+07
80c	1y	1	1.50E-03	4.33E-03	1.12E+07
80d	2y	2	1.12E-03	3.70E-03	9.93E+06
80e	5y	5	3.99E-04	2.93E-03	8.69E+06
80f	10y	10	2.05E-04	2.46E-03	8.13E+06

Results based on NUREG-1465 Source Term

Case	Decay Time	Decay Time (years)	Mean Consequences within 100 Miles (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
77a	30d	0.082192	1.27E-02	1.88E-02	5.58E+06
77b	90d	0.246575	9.86E-03	1.82E-02	5.43E+06
77c	1y	1	7.13E-03	1.68E-02	5.28E+06
77d	2y	2	5.64E-03	1.58E-02	5.12E+06
77e	5y	5	3.18E-03	1.43E-02	4.90E+06
77f	10y	10	1.63E-03	1.29E-02	4.72E+06
78a	30d	0.082192	8.36E-04	9.92E-04	4.12E+06
78b	90d	0.246575	6.83E-04	9.62E-04	4.02E+06
78c	1y	1	5.41E-04	9.09E-04	3.95E+06
78d	2y	2	4.41E-04	8.71E-04	3.87E+06
78e	5y	5	2.54E-04	8.14E-04	3.77E+06
78f	10y	10	1.47E-04	7.70E-04	3.69E+06

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Results based on NUREG-1465 Source Term (3 rem relocation criterion)

Case	Decay Time	Decay Time (years)	Mean Consequences within 100 Miles (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
77a	30d	0.082192			
77b	90d	0.246575			
77c	1y	1			
77d	2y	2			
77e	5y	5			
77f	10y	10			
78a3rem	30d	0.082192	8.82E-04	3.64E+06	
78b3rem	90d	0.246575	8.53E-04	3.56E+06	
78c3rem	1y	1	8.02E-04	3.41E+06	
78d3rem	2y	2	8.14E-04	3.33E+06	
78e3rem	5y	5	7.66E-04	3.17E+06	
78f3rem	10y	10	7.08E-04	3.14E+06	

Results based on NUREG-1465 Source Term (2 rem relocation criterion)

Case	Decay Time	Decay Time (years)	Mean Consequences within 100 Miles (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
77a	30d	0.082192			
77b	90d	0.246575			
77c	1y	1			
77d	2y	2			
77e	5y	5			
77f	10y	10			
78a2rem	30d	0.082192	7.90E-04	3.20E+06	
78b2rem	90d	0.246575	7.60E-04	3.13E+06	
78c2rem	1y	1	7.18E-04	2.99E+06	
78d2rem	2y	2	6.91E-04	2.88E+06	
78e2rem	5y	5	6.48E-04	2.68E+06	
78f2rem	10y	10	6.05E-04	2.58E+06	

Results based on NUREG-1465 (modified) Source Term (with only .5% Ru release)

Case	Decay Time	Decay Time (years)	Mean Consequences (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
89a	30d	0.082192	2.38E-02	8.02E-02	
89b	90d	0.246575	2.00E-02	8.03E-02	
89c	1y	1	1.34E-02	7.68E-02	
89d	2y	2	9.33E-03	7.35E-02	
89e	5y	5	5.98E-03	6.89E-02	
89f	10y	10	4.53E-03	6.37E-02	
80a	30d	0.082192			
80b	90d	0.246575			
80c	1y	1			
80d	2y	2			
80e	5y	5			
80f	10y	10			

Results based on NUREG-1465 (modified) Source Term (with Ru-106 inhalation DCF=0)

Case	Decay Time	Decay Time (years)	Mean Consequences (Surry population, 95% evacuation)		
			Ind. Risk of Early Fatalities	Ind. Risk of Can Fat.	Societal Dose within 50 miles
79a0	30d	0.082192	2.71E-02	9.35E-02	
79b0	90d	0.246575	2.17E-02	9.45E-02	
79c0	1y	1	1.36E-02	8.57E-02	
79d0	2y	2	9.63E-03	7.81E-02	
79e0	5y	5	6.13E-03	6.96E-02	
79f0	10y	10	4.60E-03	6.38E-02	
80a	30d	0.082192			
80b	90d	0.246575			
80c	1y	1			
80d	2y	2			
80e	5y	5			
80f	10y	10			

Ind. Risk of Early Fat.

Decay Time (years)	Mean Consequences					
	1465	1465	1465	1465	1465	1465
	(mod) Late Evac.	(mod) Early Evac.	Late Evac.	Early Evac.	(mod) Late Evac.	(mod) Late Evac.
0.082192	4.43E-02	2.01E-03	1.27E-02	8.36E-04	2.38E-02	2.71E-02 ✓
0.246575	4.19E-02	1.87E-03	9.86E-03	6.83E-04	2.00E-02	2.17E-02 ✓
1	3.46E-02	1.50E-03	7.13E-03	5.44E-04	1.34E-02	1.36E-02 ✓
2	2.57E-02	1.12E-03	5.64E-03	4.41E-04	9.33E-03	9.63E-03 ✓
5	8.96E-03	3.99E-04	3.18E-03	2.54E-04	5.98E-03	6.13E-03 ✓
10	4.68E-03	2.05E-04	1.63E-03	1.47E-04	4.53E-03	4.60E-03 ✓
					.5% Ru	Ru inh DCF=0

Individual Risk of Can. Fat.

Decay Time (years)	Mean Consequences										
	1465	1465	1465	1465	1465	1465	1465	1465	1465		
	(mod) Late Evac.	(mod) Early Evac.	Late Evac.	Early Evac.	Early Evac.	Early Evac.	(mod) Late Evac.	(mod) Late Evac.			
0.082192	8.24E-02	4.79E-03	1.88E-02	9.92E-04	8.82E-04	7.90E-04	8.02E-02	9.35E-02 ✓			
0.246575	8.20E-02	4.77E-03	1.82E-02	9.62E-04	8.53E-04	7.60E-04	8.03E-02	9.45E-02 ✓			
1	8.49E-02	4.33E-03	1.68E-02	9.09E-04	8.02E-04	7.18E-04	7.68E-02	8.57E-02 ✓			
2	8.42E-02	3.70E-03	1.58E-02	8.71E-04	8.14E-04	6.91E-04	7.35E-02	7.81E-02 ✓			
5	7.08E-02	2.93E-03	1.43E-02	8.14E-04	7.66E-04	6.48E-04	6.89E-02	6.96E-02 ✓			
10	6.39E-02	2.46E-03	1.29E-02	7.70E-04	7.08E-04	6.05E-04	6.37E-02	6.38E-02 ✓			
							4 rem relo	3 rem relo	2 rem relo	.5% Ru	Ru inh DCF=0

Societal Dose within 50 miles

Decay Time	Mean Consequences								
	1465	1465	1465	1465	1465	1465			
	(mod) Late Evac.	(mod) Early Evac.	Late Evac.	Early Evac.	Early Evac.	Early Evac.			
0.082192	2.37E+07	1.35E+07	5.58E+06	4.12E+06	3.64E+06	3.20E+06			
0.246575	2.25E+07	1.29E+07	5.43E+06	4.02E+06	3.56E+06	3.13E+06			
1	1.93E+07	1.12E+07	5.28E+06	3.95E+06	3.41E+06	2.99E+06			
2	1.69E+07	9.93E+06	5.12E+06	3.87E+06	3.33E+06	2.88E+06			
5	1.45E+07	8.69E+06	4.90E+06	3.77E+06	3.17E+06	2.68E+06			
10	1.34E+07	8.13E+06	4.72E+06	3.69E+06	3.14E+06	2.58E+06			
							4 rem relo	3 rem relo	2 rem relo