

**TABLE 5.5.2.2–1.—Potential Chemical Accident Consequences (Median Meteorology)**

ERPG-2 Concentration (ppm)	ERPG-3 Concentration (ppm)	Noninvolved Worker		Site Boundary		ERPG-2 Distance (meters)
		Average Predicted Concentration (ppm)	Fraction of ERPG-2	Average Predicted Concentration (ppm)	Fraction of ERPG-2	
Building 191, High Explosives Application Facility – Chemical Dispersion (1,2-Dichloroethane)						
200	300	0.108	$5.4 \times 10^{-4}$	0.0175	$8.8 \times 10^{-5}$	11
Building 239, Radiography Facility – Toxic gas release (NO <sub>2</sub> )						
5	20	27.5	5.5	0.81	0.16	246
Building 322, Plating Shop – Multiple Container Liquid Spill (Hydrofluoric Acid)						
20	50	371	18.6	4.86	0.24	475
Building 331, Tritium Facility actinide activities – Nitric acid spill						
6	78	24	4	0.24	0.04	205
Building 332, Plutonium Facility – Chlorine release						
3	20	593	198	11.6	3.9	1,700
Building 334, Hardened Engineering Test Building – Toxic gas release (NO <sub>2</sub> )						
5	20	110	22	2.02	0.40	529
Building 514/612/625/693, Radioactive and Hazardous Waste Management Complex – Earthquake release of Freon-22						
7,500	7,500	415	0.06	169	0.023	19
Building 581, National Ignition Facility – Material Spill, Release of Nitric acid solution						
6	78	130	21.7	12.3	2.1	536
Site 300 Materials Management Facility – Hazardous materials release by fire (LiOH)						
1	102	1.42	1.42	0	0	119
Site 300 Explosive Waste Treatment Facility – Fire release of hydrogen fluoride						
20	50	28.1	1.41	0.097	0.049	119

<sup>a</sup> These consequences apply to the No Action Alternative, the Proposed Action, and the Reduced Operation Alternative.  
ERPG = Emergency Response Planning Guideline.