6/26/2008

Applicant's XOQDOQ Runs

- Original runs in response to Env RAI QA2.7-4

Fermi 3 COL XOQDOQ Run(s)

1. Inputs

Card Type	Variable	Column	Description	Licensee	Staff
1	KOPT(1)	1	Distribute calms as the first wind speed class	0	
	KOPT(2)	2	Input JFD data as percent frequency	0	
	KOPT(3)	3	Compute sector spread (for purge calculation)	1	
	KOPT(4)	4	Plot short-term X/Q vs probability of occurrence	0	
	KOPT(5)	5	Use cubic spline for fitting intermittent releases	1	
	KOPT(6)	6	Punch radial segment X/Q and D/Q values	1	
	KOPT(7)	7	Punch X/Q and D/Q values for points of interest	1	
	KOPT(8)	8	Correct X/Q and D/Q values for open terrain recirc	1	
	KOPT(9)	9	Correct X/Q and D/Q values using site-specific recirc factors	0	
	KOPT(10)	10	Use desert sigma curves	0	
	KOPT(11)	11	Calculate X/Q values using 20 deg and 30 deg sectors	0	
2	TITLM	1-80	Title		
3	NVEL	1-5	Number of velocity categories	9	
	NSTA	6-10	Number of Stability categories	7	
	NDIS	11-15	Number of distances with terrain height data	6	
	INC	16-20	Increment in percent for plotted results	15	
	NPTYPE	21-25	Number of titles for card receptor type	5	
	NEXIT	26-30	Number of release exit points	3	
	NCOR	31-35	Number of distances of site-specific recirc factors	0	
4	PLEV	1-5	Wind measurement height (m)	10.	
	DECAY(1)	6-10	Half-life (days)	101.	
	DECAY(2)	11-15	Half-life (days)	2.26	
	DECAY(3)	16-20	Half-life (days)	-8.	
	PLGRAD	21-25	Plant Grade (ft above MSL) • If <0, DIST in mi and HT in ft above plant grade • If =0, DIST in m and HT in m above plant grade • If >0, DIST in mi and HT in ft above MSL	0.	
5	CALM(1)	1-5	Number of (or % of) calm hours for stability A	0	
	CALM(2)	6-10	Number of (or % of) calm hours for stability B	0	
	CALM(3)	11-15	Number of (or % of) calm hours for stability C	0	
	CALM(4)	16-20	Number of (or % of) calm hours for stability D	0	
	CALM(5)	21-25	Number of (or % of) calm hours for stability E	0	
	CALM(6)	26-30	Number of (or % of) calm hours for stability F	0	
	CALM(7)	31-35	Number of (or % of) calm hours for stability G	0	
6	FREQ(K,I,J)		JFD (by wind direction K, wind speed I, stability J)	-	
7	UCOR	1-5	Ws correction factor (<0 for mps; >100 for mph)	101	
	UMAX(1)	6-10	Maximum ws for category 1 (<1.5 mps)	0.75	
	UMAX(2)	11-15	Maximum ws for category 2	2.5	
	UMAX(3)	16-20	Maximum ws for category 3	4.5	
	UMAX(4)	21-25	Maximum ws for category 4	6.5	
	UMAX(5)	26-30	Maximum ws for category 5	8.5	
	UMAX(6)	31-35	Maximum ws for category 6	11.5	
	UMAX(7)	36-40	Maximum ws for category 7	14.5	
	UMAX(8)	41-45	Maximum ws for category 8	18.5	
	UMAX(9)	46-50	Maximum ws for category 9	23.5	
	UMAX(10)	51-55	Maximum ws for category 10		
	UMAX(11)	56-60	Maximum ws for category 11		
	UMAX(12)	61-65	Maximum ws for category 12		
	UMAX(13)	66-70	Maximum ws for category 13		
	UMAX(14)	71-75	Maximum ws for category 14		
8	VRDIST(K,I)	1-80	Array of distances (m) containing recirc factors		
9	VRCR (K,I)	1-80	Array of recirc factors		
10	DIST(1,1)	1-5	Distance (m) of terrain height in S sector	1609	

Fermi 3 COL XOQDOQ Run(s)

Card Type	Variable	Column	Description	Licensee	Staff
	DIST(2,1)	6-10	Distance (m) of terrain height in SSW sector	1609	
	DIST(3,1)	11-15	Distance (m) of terrain height in SW sector	1609	
	DIST(4,1)	16-20	Distance (m) of terrain height in WSW sector	1609	
	DIST(5,1)	21-25	Distance (m) of terrain height in W sector	1609	
	DIST(6,1)	26-30	Distance (m) of terrain height in WNW sector	1609	
	DIST(7,1)	31-35	Distance (m) of terrain height in NW sector	1609	
	DIST(8,1)	36-40	Distance (m) of terrain height in NNW sector	1609	
	DIST(9,1)	41-45	Distance (m) of terrain height in N sector	1609	
	DIST(10,1)	46-50	Distance (m) of terrain height in NNE sector	1609	
	DIST(11,1)	51-55	Distance (m) of terrain height in NE sector	1609	
	DIST(12,1)	56-60	Distance (m) of terrain height in ENE sector	1609	
	DIST(13,1)	61-65	Distance (m) of terrain height in E sector	1609	
	DIST(14,1)	66-70	Distance (m) of terrain height in ESE sector	1609	
	DIST(15,1)	71-75	Distance (m) of terrain height in SE sector	1609	
	DIST(16,1)	76-80	Distance (m) of terrain height in SSE sector	1609	
11	HT(1,1)	1-5	Terrain height (m above plant grade) in S sector	0	0
	HT(2,1)	6-10	Terrain height (m above plant grade) in SSW sector	2	0
	HT(3,1)	11-15	Terrain height (m above plant grade) in SW sector	4	2
	HT(4,1)	16-20	Terrain height (m above plant grade) in WSW sector	5	1
	HT(5,1)	21-25	Terrain height (m above plant grade) in W sector	7	5
	HT(6,1)	26-30	Terrain height (m above plant grade) in WNW sector	8	5
	HT(7,1)	31-35	Terrain height (m above plant grade) in NW sector	7	5
	HT(8,1)	36-40	Terrain height (m above plant grade) in NNW sector	5	3
	HT(9,1)	41-45	Terrain height (m above plant grade) in N sector	4	2
	HT(10,1)	46-50	Terrain height (m above plant grade) in NNE sector	0	0
	HT(11,1)	51-55	Terrain height (m above plant grade) in NE sector	0	0
	HT(12,1)	56-60	Terrain height (m above plant grade) in ENE sector	0	0
	HT(13,1)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,1)	66-70	Terrain height (m above plant grade) in ESE sector	0	0
	HT(15,1)	71-75	Terrain height (m above plant grade) in SE sector	0	0
	HT(16,1)	76-80	Terrain height (m above plant grade) in ESE sector	0	0
10	DIST(1,2)	1-5	Distance (m) of terrain height in S sector	3219	
	DIST(2,2)	6-10	Distance (m) of terrain height in SSW sector	3219	
	DIST(3,2)	11-15	Distance (m) of terrain height in SW sector	3219	
	DIST(4,2)	16-20	Distance (m) of terrain height in WSW sector	3219	
	DIST(5,2)	21-25	Distance (m) of terrain height in W sector	3219	
	DIST(6,2)	26-30	Distance (m) of terrain height in WNW sector	3219	
	DIST(7,2)	31-35	Distance (m) of terrain height in NW sector	3219	
	DIST(8,2)	36-40	Distance (m) of terrain height in NNW sector	3219	
	DIST(9,2)	41-45	Distance (m) of terrain height in N sector	3219	
	DIST(10,2)	46-50	Distance (m) of terrain height in NNE sector	3219	
	DIST(11,2)	51-55	Distance (m) of terrain height in NE sector	3219	
	DIST(12,2)	56-60	Distance (m) of terrain height in ENE sector	3219	
	DIST(13,2)	61-65	Distance (m) of terrain height in E sector	3219	
	DIST(14,2)	66-70	Distance (m) of terrain height in ESE sector	3219	
	DIST(15,2)	71-75	Distance (m) of terrain height in SE sector	3219	
	DIST(16,2)	76-80	Distance (m) of terrain height in SSE sector	3219	
11	HT(1,2)	1-5	Terrain height (m above plant grade) in S sector	0	0
	HT(2,2)	6-10	Terrain height (m above plant grade) in SSW sector	2	0
	HT(3,2)	11-15	Terrain height (m above plant grade) in SW sector	4	2
	HT(4,2)	16-20	Terrain height (m above plant grade) in WSW sector	5	1
	HT(5,2)	21-25	Terrain height (m above plant grade) in W sector	7	5
	HT(6,2)	26-30	Terrain height (m above plant grade) in WNW sector	8	5

Fermi 3 COL XOQDOQ Run(s)

Card Type	Variable	Column	Description	Licensee	Staff
	HT(7,2)	31-35	Terrain height (m above plant grade) in NW sector	7	5
	HT(8,2)	36-40	Terrain height (m above plant grade) in NNW sector	5	3
	HT(9,2)	41-45	Terrain height (m above plant grade) in N sector	4	2
	HT(10,2)	46-50	Terrain height (m above plant grade) in NNE sector	0	0
	HT(11,2)	51-55	Terrain height (m above plant grade) in NE sector	0	0
	HT(12,2)	56-60	Terrain height (m above plant grade) in ENE sector	0	0
	HT(13,2)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,2)	66-70	Terrain height (m above plant grade) in ESE sector	0	0
	HT(15,2)	71-75	Terrain height (m above plant grade) in SE sector	0	0
	HT(16,2)	76-80	Terrain height (m above plant grade) in ESE sector	0	0
10	DIST(1,3)	1-5	Distance (m) of terrain height in S sector	4828	
	DIST(2,3)	6-10	Distance (m) of terrain height in SSW sector	4828	
	DIST(3,3)	11-15	Distance (m) of terrain height in SW sector	4828	
	DIST(4,3)	16-20	Distance (m) of terrain height in WSW sector	4828	
	DIST(5,3)	21-25	Distance (m) of terrain height in W sector	4828	
	DIST(6,3)	26-30	Distance (m) of terrain height in WNW sector	4828	
	DIST(7,3)	31-35	Distance (m) of terrain height in NW sector	4828	
	DIST(8,3)	36-40	Distance (m) of terrain height in NNW sector	4828	
	DIST(9,3)	41-45	Distance (m) of terrain height in N sector	4828	
	DIST(10,3)	46-50	Distance (m) of terrain height in NNE sector	4828	
	DIST(11,3)	51-55	Distance (m) of terrain height in NE sector	4828	
	DIST(12,3)	56-60	Distance (m) of terrain height in ENE sector	4828	
	DIST(13,3)	61-65	Distance (m) of terrain height in E sector	4828	
	DIST(14,3)	66-70	Distance (m) of terrain height in ESE sector	4828	
	DIST(15,3)	71-75	Distance (m) of terrain height in SE sector	4828	
	DIST(16,3)	76-80	Distance (m) of terrain height in SSE sector	4828	
11	HT(1,3)	1-5	Terrain height (m above plant grade) in S sector	0	0
	HT(2,3)	6-10	Terrain height (m above plant grade) in SSW sector	2	0
	HT(3,3)	11-15	Terrain height (m above plant grade) in SW sector	4	2
	HT(4,3)	16-20	Terrain height (m above plant grade) in WSW sector	5	1
	HT(5,3)	21-25	Terrain height (m above plant grade) in W sector	7	5
	HT(6,3)	26-30	Terrain height (m above plant grade) in WNW sector	8	5
	HT(7,3)	31-35	Terrain height (m above plant grade) in NW sector	7	5
	HT(8,3)	36-40	Terrain height (m above plant grade) in NNW sector	5	3
	HT(9,3)	41-45	Terrain height (m above plant grade) in N sector	4	5
	HT(10,3)	46-50	Terrain height (m above plant grade) in NNE sector	0	0
	HT(11,3)	51-55	Terrain height (m above plant grade) in NE sector	0	0
	HT(12,3)	56-60	Terrain height (m above plant grade) in ENE sector	0	0
	HT(13,3)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,3)	66-70	Terrain height (m above plant grade) in ESE sector	0	0
	HT(15,3)	71-75	Terrain height (m above plant grade) in SE sector	0	0
	HT(16,3)	76-80	Terrain height (m above plant grade) in ESE sector	0	0
10	DIST(1,4)	1-5	Distance (m) of terrain height in S sector	6437	
	DIST(2,4)	6-10	Distance (m) of terrain height in SSW sector	6437	
	DIST(3,4)	11-15	Distance (m) of terrain height in SW sector	6437	
	DIST(4,4)	16-20	Distance (m) of terrain height in WSW sector	6437	
	DIST(5,4)	21-25	Distance (m) of terrain height in W sector	6437	
	DIST(6,4)	26-30	Distance (m) of terrain height in WNW sector	6437	
	DIST(7,4)	31-35	Distance (m) of terrain height in NW sector	6437	
	DIST(8,4)	36-40	Distance (m) of terrain height in NNW sector	6437	
	DIST(9,4)	41-45	Distance (m) of terrain height in N sector	6437	
	DIST(10,4)	46-50	Distance (m) of terrain height in NNE sector	6437	
	DIST(11,4)	51-55	Distance (m) of terrain height in NE sector	6437	
	DIST(12,4)	56-60	Distance (m) of terrain height in ENE sector	6437	
	DIST(13,4)	61-65	Distance (m) of terrain height in E sector	6437	

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Card Type	Variable	Column	Description	Licensee	Staff
	DIST(14,4)	66-70	Distance (m) of terrain height in ESE sector	6437	
	DIST(15,4)	71-75	Distance (m) of terrain height in SE sector	6437	
	DIST(16,4)	76-80	Distance (m) of terrain height in SSE sector	6437	
11	HT(1,4)	1-5	Terrain height (m above plant grade) in S sector	0	0
	HT(2,4)	6-10	Terrain height (m above plant grade) in SSW sector	2	0
	HT(3,4)	11-15	Terrain height (m above plant grade) in SW sector	4	2
	HT(4,4)	16-20	Terrain height (m above plant grade) in WSW sector	5	1
	HT(5,4)	21-25	Terrain height (m above plant grade) in W sector	7	5
	HT(6,4)	26-30	Terrain height (m above plant grade) in WNW sector	8	5
	HT(7,4)	31-35	Terrain height (m above plant grade) in NW sector	7	5
	HT(8,4)	36-40	Terrain height (m above plant grade) in NNW sector	5	3
	HT(9,4)	41-45	Terrain height (m above plant grade) in N sector	4	5
	HT(10,4)	46-50	Terrain height (m above plant grade) in NNE sector	4	2
	HT(11,4)	51-55	Terrain height (m above plant grade) in NE sector	0	0
	HT(12,4)	56-60	Terrain height (m above plant grade) in ENE sector	0	0
	HT(13,4)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,4)	66-70	Terrain height (m above plant grade) in ESE sector	0	0
	HT(15,4)	71-75	Terrain height (m above plant grade) in SE sector	0	0
	HT(16,4)	76-80	Terrain height (m above plant grade) in ESE sector	0	0
10	DIST(1,5)	1-5	Distance (m) of terrain height in S sector	8047	
	DIST(2,5)	6-10	Distance (m) of terrain height in SSW sector	8047	
	DIST(3,5)	11-15	Distance (m) of terrain height in SW sector	8047	
	DIST(4,5)	16-20	Distance (m) of terrain height in WSW sector	8047	
	DIST(5,5)	21-25	Distance (m) of terrain height in W sector	8047	
	DIST(6,5)	26-30	Distance (m) of terrain height in WNW sector	8047	
	DIST(7,5)	31-35	Distance (m) of terrain height in NW sector	8047	
	DIST(8,5)	36-40	Distance (m) of terrain height in NNW sector	8047	
	DIST(9,5)	41-45	Distance (m) of terrain height in N sector	8047	
	DIST(10,5)	46-50	Distance (m) of terrain height in NNE sector	8047	
	DIST(11,5)	51-55	Distance (m) of terrain height in NE sector	8047	
	DIST(12,5)	56-60	Distance (m) of terrain height in ENE sector	8047	
	DIST(13,5)	61-65	Distance (m) of terrain height in E sector	8047	
	DIST(14,5)	66-70	Distance (m) of terrain height in ESE sector	8047	
	DIST(15,5)	71-75	Distance (m) of terrain height in SE sector	8047	
	DIST(16,5)	76-80	Distance (m) of terrain height in SSE sector	8047	
11	HT(1,5)	1-5	Terrain height (m above plant grade) in S sector	0	0
	HT(2,5)	6-10	Terrain height (m above plant grade) in SSW sector	2	0
	HT(3,5)	11-15	Terrain height (m above plant grade) in SW sector	4	2
	HT(4,5)	16-20	Terrain height (m above plant grade) in WSW sector	8	1
	HT(5,5)	21-25	Terrain height (m above plant grade) in W sector	7	5
	HT(6,5)	26-30	Terrain height (m above plant grade) in WNW sector	8	5
	HT(7,5)	31-35	Terrain height (m above plant grade) in NW sector	8	5
	HT(8,5)	36-40	Terrain height (m above plant grade) in NNW sector	7	3
	HT(9,5)	41-45	Terrain height (m above plant grade) in N sector	5	5
	HT(10,5)	46-50	Terrain height (m above plant grade) in NNE sector	5	2
	HT(11,5)	51-55	Terrain height (m above plant grade) in NE sector	0	0
	HT(12,5)	56-60	Terrain height (m above plant grade) in ENE sector	0	0
	HT(13,5)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,5)	66-70	Terrain height (m above plant grade) in ESE sector	0	0
	HT(15,5)	71-75	Terrain height (m above plant grade) in SE sector	0	0
	HT(16,5)	76-80	Terrain height (m above plant grade) in ESE sector	0	0
10	DIST(1,5)	1-5	Distance (m) of terrain height in S sector	80467	

Fermi 3 COL XOQDOQ Run(s)

Card Type	Variable	Column	Description	Licensee	Staff
	DIST(2,5)	6-10	Distance (m) of terrain height in SSW sector	80467	
	DIST(3,5)	11-15	Distance (m) of terrain height in SW sector	80467	
	DIST(4,5)	16-20	Distance (m) of terrain height in WSW sector	80467	
	DIST(5,5)	21-25	Distance (m) of terrain height in W sector	80467	
	DIST(6,5)	26-30	Distance (m) of terrain height in WNW sector	80467	
	DIST(7,5)	31-35	Distance (m) of terrain height in NW sector	80467	
	DIST(8,5)	36-40	Distance (m) of terrain height in NNW sector	80467	
	DIST(9,5)	41-45	Distance (m) of terrain height in N sector	80467	
	DIST(10,5)	46-50	Distance (m) of terrain height in NNE sector	80467	
	DIST(11,5)	51-55	Distance (m) of terrain height in NE sector	80467	
	DIST(12,5)	56-60	Distance (m) of terrain height in ENE sector	80467	
	DIST(13,5)	61-65	Distance (m) of terrain height in E sector	80467	
	DIST(14,5)	66-70	Distance (m) of terrain height in ESE sector	80467	
	DIST(15,5)	71-75	Distance (m) of terrain height in SE sector	80467	
	DIST(16,5)	76-80	Distance (m) of terrain height in SSE sector	80467	
11	HT(1,6)	1-5	Terrain height (m above plant grade) in S sector	45	42
	HT(2,6)	6-10	Terrain height (m above plant grade) in SSW sector	37	30
	HT(3,6)	11-15	Terrain height (m above plant grade) in SW sector	37	33
	HT(4,6)	16-20	Terrain height (m above plant grade) in WSW sector	68	66
	HT(5,6)	21-25	Terrain height (m above plant grade) in W sector	151	145
	HT(6,6)	26-30	Terrain height (m above plant grade) in WNW sector	174	170
	HT(7,6)	31-35	Terrain height (m above plant grade) in NW sector	121	115
	HT(8,6)	36-40	Terrain height (m above plant grade) in NNW sector	159	158
	HT(9,6)	41-45	Terrain height (m above plant grade) in N sector	129	127
	HT(10,6)	46-50	Terrain height (m above plant grade) in NNE sector	22	11
	HT(11,6)	51-55	Terrain height (m above plant grade) in NE sector	22	14
	HT(12,6)	56-60	Terrain height (m above plant grade) in ENE sector	22	17
	HT(13,6)	61-65	Terrain height (m above plant grade) in E sector	0	0
	HT(14,6)	66-70	Terrain height (m above plant grade) in ESE sector	7	5
	HT(15,6)	71-75	Terrain height (m above plant grade) in SE sector	14	8
	HT(16,6)	76-80	Terrain height (m above plant grade) in ESE sector	68	54
12	NPOINT(I)	12	Number of receptor locations for receptor type 1	12	
	NPOINT(2)	11	Number of receptor locations for receptor type 2	11	
	NPOINT(3)	9	Number of receptor locations for receptor type 3	9	
	NPOINT(4)	2	Number of receptor locations for receptor type 4	2	
	NPOINT(5)	2	Number of receptor locations for receptor type 5	2	
13	TITLPT(1,1)	1-16	Receptor type title	Site Boundary	
14	KDIR(1,1)	1-5	Receptor direction (1=S, 2=SSW, etc) S	1	
	PTDIST(1,1)	6-10	Receptor distance (m)	1131	
14	KDIR(1,2)	1-5	Receptor direction (1=S, 2=SSW, etc) SSW	2	
	PTDIST(1,2)	6-10	Receptor distance (m)	1156	
14	KDIR(1,3)	1-5	Receptor direction (1=S, 2=SSW, etc) SW	3	
	PTDIST(1,3)	6-10	Receptor distance (m)	1447	
14	KDIR(1,4)	1-5	Receptor direction (1=S, 2=SSW, etc) WSW	4	
	PTDIST(1,4)	6-10	Receptor distance (m)	1281	
14	KDIR(1,5)	1-5	Receptor direction (1=S, 2=SSW, etc) W	5	
	PTDIST(1,5)	6-10	Receptor distance (m)	943	
14	KDIR(1,6)	1-5	Receptor direction (1=S, 2=SSW, etc) WNW	6	
	PTDIST(1,6)	6-10	Receptor distance (m)	~~943~~ 919	
14	KDIR(1,7)	1-5	Receptor direction (1=S, 2=SSW, etc) NW	~~7~~	
	PTDIST(1,7)	6-10	Receptor distance (m)	919	
14	KDIR(1,8)	1-5	Receptor direction (1=S, 2=SSW, etc) NNW	8	
	PTDIST(1,8)	6-10	Receptor distance (m)	919	
14	KDIR(1,9)	1-5	Receptor direction (1=S, 2=SSW, etc) N	9	
	PTDIST(1,9)	6-10	Receptor distance (m)	1059	

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Card Type	Variable	Column	Description		Licensee	Staff
14	KDIR(1,10)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNE	10	
	PTDIST(1,10)	6-10	Receptor distance (m)		1531	
14	KDIR(1,11)	1-5	Receptor direction (1=S, 2=SSW, etc)	NE	11	
	PTDIST(1,11)	6-10	Receptor distance (m)		2054	
14	KDIR(1,12)	1-5	Receptor direction (1=S, 2=SSW, etc)	ESE	16	
	PTDIST(1,12)	6-10	Receptor distance (m)		1131	
13	TITLPT(2,1)	1-16	Receptor type title		Residence	
14	KDIR(2,1)	1-5	Receptor direction (1=S, 2=SSW, etc)	SSE	16	
	PTDIST(2,1)	6-10	Receptor distance (m)		1478 ✓	
14	KDIR(2,2)	1-5	Receptor direction (1=S, 2=SSW, etc)	SSW	2	
	PTDIST(2,2)	6-10	Receptor distance (m)		1442 ✓	
14	KDIR(2,3)	1-5	Receptor direction (1=S, 2=SSW, etc)	SW	3	
	PTDIST(2,3)	6-10	Receptor distance (m)		1606 ✓	
14	KDIR(2,4)	1-5	Receptor direction (1=S, 2=SSW, etc)	WSW	4	
	PTDIST(2,4)	6-10	Receptor distance (m)		1821 ✓	
14	KDIR(2,5)	1-5	Receptor direction (1=S, 2=SSW, etc)	W	5	
	PTDIST(2,5)	6-10	Receptor distance (m)		1571 ✓	
14	KDIR(2,6)	1-5	Receptor direction (1=S, 2=SSW, etc)	NW	7	
	PTDIST(2,6)	6-10	Receptor distance (m)		1107 ✓	
14	KDIR(2,7)	1-5	Receptor direction (1=S, 2=SSW, etc)	NW	7	
	PTDIST(2,7)	6-10	Receptor distance (m)		1714	
14	KDIR(2,8)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNW	8	
	PTDIST(2,8)	6-10	Receptor distance (m)		1920 ✓	
14	KDIR(2,9)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNE	10	
	PTDIST(2,9)	6-10	Receptor distance (m)		2130	
14	KDIR(2,10)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNE	10	
	PTDIST(2,10)	6-10	Receptor distance (m)		2109 ✓	
14	KDIR(2,11)	1-5	Receptor direction (1=S, 2=SSW, etc)	NE	11	
	PTDIST(2,11)	6-10	Receptor distance (m)		2182 ✓	
13	TITLPT(3,1)	1-16	Receptor type title		Garden	
14	KDIR(3,1)	1-5	Receptor direction (1=S, 2=SSW, etc)	S	1	
	PTDIST(3,1)	6-10	Receptor distance (m)		2067 ✓	
14	KDIR(3,2)	1-5	Receptor direction (1=S, 2=SSW, etc)	WSW	4	
	PTDIST(3,2)	6-10	Receptor distance (m)		3445 ✓	
14	KDIR(3,3)	1-5	Receptor direction (1=S, 2=SSW, etc)	W	5	
	PTDIST(3,3)	6-10	Receptor distance (m)		2422 ✓	
14	KDIR(3,4)	1-5	Receptor direction (1=S, 2=SSW, etc)	NW	7	
	PTDIST(3,4)	6-10	Receptor distance (m)		1110 ✓	
14	KDIR(3,5)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNW	8	
	PTDIST(3,5)	6-10	Receptor distance (m)		1757 ✓	
14	KDIR(3,6)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNW	8	
	PTDIST(3,6)	6-10	Receptor distance (m)		2355	
14	KDIR(3,7)	1-5	Receptor direction (1=S, 2=SSW, etc)	N	9	
	PTDIST(3,7)	6-10	Receptor distance (m)		3716 ✓	
14	KDIR(3,8)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNE	10	
	PTDIST(3,8)	6-10	Receptor distance (m)		3477 ✓	
14	KDIR(3,9)	1-5	Receptor direction (1=S, 2=SSW, etc)	NE	11	
	PTDIST(3,9)	6-10	Receptor distance (m)		3602 ✓	
13	TITLPT(4,1)	1-16	Receptor type title		Sheep	
14	KDIR(4,1)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNW	8	
	PTDIST(4,1)	6-10	Receptor distance (m)		7173 ✓	
14	KDIR(4,2)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNE	10	
	PTDIST(4,2)	6-10	Receptor distance (m)		7238 ✓	
13	TITLPT(5,1)	1-16	Receptor type title		Goat	
14	KDIR(5,1)	1-5	Receptor direction (1=S, 2=SSW, etc)	WNW	6	
	PTDIST(5,1)	6-10	Receptor distance (m)		3704 ✓	
14	KDIR(5,2)	1-5	Receptor direction (1=S, 2=SSW, etc)	NNW	8	

Fermi 3 COL XOQDOQ Run(s)

Card Type	Variable	Column	Description	Licensee	Staff
	PTDIST(5,2)	6-10	Receptor distance (m)	4961 ✓	
13	TITLPT(61)	1-16	Receptor type title	Meat Cow	
14	KDIR(61)	1-5	Receptor direction (1=S, 2=SSW, etc) NNW	8	
	PTDIST(6,1)	6-10	Receptor distance (m)	4904 ✓	
14	KDIR(6,2)	1-5	Receptor direction (1=S, 2=SSW, etc) NNE	10	
	PTDIST(6,2)	6-10	Receptor distance (m)	7239 ✓	
13	TITLPT(7,1)	1-16	Receptor type title	Milk Cow	
14	KDIR(7,1)	1-5	Receptor direction (1=S, 2=SSW, etc) WNW	6	
	PTDIST(7,1)	6-10	Receptor distance (m)	3513 ✓	
14	KDIR(7,2)	1-5	Receptor direction (1=S, 2=SSW, etc) NW	7	
	PTDIST(7,2)	6-10	Receptor distance (m)	5869 ✓	
15	TITLE(1,J)	1-80	Release point title	Gnd Level Radwaste bldg	PVS
16	EXIT(1)	1-5	Vent velocity (m/s)	0.	0.0
	DIAMTR(1)	6-10	Vent inside diameter (m)	0.	0.0
	HSTACK(1)	11-15	Vent height (m above plant grade) (neg if elev rel)	10.	0.0
	HBLDG(1)	16-20	Vent building height (m above plant grade)	0.	37.7
	CRSEC(1)	21-25	Vent building min cross-sectional area (m^2)	350.	2134
	SLEV(1)	26-30	Wind height used for vent elevated release (m above plant grade)	10.	10.0
	HEATR(1)	31-35	Vent heat emission rate (cal/sec)	0.	
17	RLSID(I)	1	Release point identifier		
	IPURGE(I)	2-5	Intermittent release flag • If =0, no intermittent releases • If =1, no decay	0	0
	NPURGE(I)	6-10	Number of intermittent release per year	0	0
	NPRGHR(I)	11-15	Average number of hours per intermittent release	0	0
15	TITLE(2,J)	1-80	Release point title	Reactor Bldg Fuel Bldg Stk	PVS
16	EXIT(2)	1-5	Vent velocity (m/s)	17.78	0.0
	DIAMTR(2)	6-10	Vent inside diameter	2.4	0.0
	HSTACK(2)	11-15	Vent height (m above plant grade) (neg if elev rel)	52.62	0.0
	HBLDG(2)	16-20	Vent building height (m above plant grade)	48.05	37.7
	CRSEC(2)	21-25	Vent building min cross-sectional area (m^2)	0.	2134
	SLEV(2)	26-30	Wind height used for vent elevated release (m above plant grade)	52.62	10.0
	HEATR(2)	31-35	Vent heat emission rate (cal/sec)	0.	0.0
17	RLSID(2)	1	Release point identifier		
	IPURGE(2)	2-5	Intermittent release flag • If =0, no intermittent releases • If =1, no decay	0	0
	NPURGE(2)	6-10	Number of intermittent release per year	0	0
	NPRGHR(2)	11-15	Average number of hours per intermittent release	0	0
15	TITLE(3,J)	1-80	Release point title	Turbine Bldg Stk	PVS
16	EXIT(3)	1-5	Vent velocity (m/s)	17.78	0.0
	DIAMTR(3)	6-10	Vent inside diameter	1.95	0.0
	HSTACK(3)	11-15	Vent height (m above plant grade) (neg if elev rel)	71.3	0.0
	HBLDG(3)	16-20	Vent building height (m above plant grade)	52.	37.7
	CRSEC(3)	21-25	Vent building min cross-sectional area (m^2)	0.	2134
	SLEV(3)	26-30	Wind height used for vent elevated release (m above plant grade)	71.3	10.0
	HEATR(3)	31-35	Vent heat emission rate (cal/sec)	0.	0.0
17	RLSID(3)	1	Release point identifier		
	IPURGE(3)	2-5	Intermittent release flag • If =0, no intermittent releases • If =1, no decay	0	0
	NPURGE(3)	6-10	Number of intermittent release per year	0	0
	NPRGHR(3)	11-15	Average number of hours per intermittent release	0	0

Terrain Heights.xls

Distance (mi)	1	2	3	4	5	50
	Elevation (m above plant grade)					
N	2	2	5	5	7	127
NNE	0	0	0	2	6	11
NE	0	0	0	0	0	14
ENE	0	0	0	0	0	17
E	0	0	0	0	0	0
ESE	0	0	0	0	0	5
SE	0	0	0	0	0	8
SSE	0	0	0	0	0	54
S	0	0	0	0	0	42
SSW	0	0	0	0	0	30
SW	2	2	2	2	2	33
WSW	1	1	1	1	6	66
W	5	5	5	5	5	145
WNW	5	5	5	5	6	170
NW	5	5	5	5	5	115
NNW	3	3	3	3	4	158

Terrain Heights.xls

Distance (mi)	1	2	3	4	5	50
	Elevation (feet above MSL)					
N	588	588	600	600	605	1000
NNE	583	583	583	588	604	620
NE	583	583	583	583	583	630
ENE	583	583	583	583	583	640
E	583	583	583	583	583	583
ESE	583	583	583	583	583	600
SE	583	583	583	583	583	610
SSE	583	583	583	583	583	760
S	583	583	583	583	583	720
SSW	583	583	583	583	583	680
SW	588	588	588	588	588	690
WSW	585	585	585	585	603	800
W	598	598	598	598	600	1060
WNW	601	601	601	601	603	1140
NW	600	600	600	600	601	960
NNW	592	592	592	592	597	1100

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00101111000
Fermi COL_A
    9    7    6   15    5    3    0
   10. 101. 2.26   -8.   0.
    0    0    0    0    0    0    0
    0    0    5    3    5    1   10    6    8    7    5    2    3    0    0    0
    6    3   10   24    3    4    4    8    5    7   10   10   22   17   12    4
   29   35   46   42   42   56   63   59   62   68   58  100   97  133  117   53
   53   63  108  102  106  279  363  243  222  199  137  158  188  221  202  137
   72   44  131  145  141  326  422  320  203  300  174  199  146  208  198  149
   72   48   79  129  181  211  124  123   79  256  200  163  122  127  108  115
   12   14   15   39  116   57    7   10    9   68   79   20   42   33   30   37
   12    7    1    7   37    9    0    1    1   11   18    5    3    5    4    8
    0    0    0    0    2    0    0    0    0    2    1    0    0    0    0    0
    0    0    0    1    0    1    1    0    0    2    0    0    0    0    0    0
    3    2    2    1    0    1    1    4    4    3    5    4   15    9    6    1
   30   23   12   18    7   17   32   14   19   25   28   38   38   45   43   36
   35   23   30   19   18   40   75   61   46   50   57   58   78   70   55   61
   34   20   19   28   25   37   51   39   24   82   58   71   51   43   43   42
   20   19   15   28   35   22   21   12   18   70   84   28   36   25   22   32
    7   12    3   12   17   13    4    2    2   30   43   13   11   14    6    9
    6    1    2    4    7    1    0    0    0   10   25    2    1    2    2    0
    0    0    0    0    0    0    0    0    0    0    4    0    0    0    0    0
    0    0    0    0    0    1    0    0    1    2    1    0    0    0    0    0
    2    5    4    4    1    0    1    0    5    7    4   12   14   10    6   12
   27   24   12    6    5   15   14   15   22   29   37   48   48   57   44   27
   42   30   28   11   20   37   46   39   39   50   51   57   52   48   36   60
   29   23   36   29   19   28   34   32   27   56   77   36   48   39   31   41
   30   21   27   42   28   30   14    6   20   74   77   44   26   27   22   13
   10   22    6   14   18   12    5    7    5   35   48   16   16   20    9    8
    6    0    1   10   10    2    1    1    0    8   45    6    0    3    5    2
    0    0    0    2    1    0    0    0    0    0    6    0    0    0    0    0
    1    0    1    1    1    2    6    2    3    8    7    4    4    3    0    0
   48   29   26   12    6   11   11    8   11   31   36   56   77   71   55   42
  122  169   90   51   47   73   55   60   77   74  186  330  260  216  213  189
  144  180  251  131   93  158  162   93  133  194  391  431  290  256  271  290
  133  131  380  240  179  194  173  103  161  256  483  333  216  180  178  223
  222  133  330  324  240  195  102   92  126  392  585  237  160  152  115  128
   99  105   84  123  163   64   23   18   36  171  346   55   38   77   20   48
   31   34    4   43   79   30    9    2    3   76  125   21    6   11    2   15
    4   10    2    4   26    1    1    2    0    1   28    4    0    0    0    0
    2    0    3    3    4    0    2    1    8    9    4    6    5    3    4    2
   65   45   32   17   20   18   21   31   71   77  128  212  193  193  140   74
  167  225   74   48   54   98   83  114  202  239  464  525  306  352  408  258
  166  159  210  132  131  185  164  197  267  507  340  228  142  139  131  211
   92   60  117  126  123  182  150  142  231  452  158   57   47   58   47   59
   56   39   35   67   91   82   87   94  153  423  113   23   13   29   36   23
   13    6    9   13   55   35   11   14   34  121   42    2    3    6    6    8
    7    2    0    3   26   14    2    0    7   21   10    0    2    1    1    3
    1    0    0    3   10    0    0    2    1    3    3    0    1    2    0    0
    2    1    1    1    0    2    2    3    3    2    3    5    4    3    3    5
   48   32   15   10   12   13   13   40   68   99  134  203  221  265  162   93
  149   66   24   14   18   42   42   72  106  177  221  215  122  212  160  144
   98   35   11   10   32   47   66   93   67  141   26    6    7   14   15   47
   13    9    5   12   20   36   37   57   47   98   14    5    9    2    6    5
    8    3    0    8   16   16   22   32   41   81    9    5    1    6    2    6
    1    0    0    2    8    5    7    7   15   14    2    1    0    1    0    0
    0    0    0    0    8    0    1    3    2    4    0    5    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    2    0    0    0
    0    0    0    0    0    0    0    1    0    0    1    2    2    0    2    0
   23   14    5    1    1    7    9    7   21   23   49  128  223  333  151   77
   63   12    5    4   10   27   37   21   17   60   49   81   49  184   87   91
   20   10    2    2   10   27   37   31   18   29   11    2    2    3    1   19
    4    0    0    2   10   18   22   24    9   15    5    0    0    1    1    0
    1    0    0    0    8   13   20   18    5   16    7    5    0    0    0    0
    0    0    0    0    2    1    3    5    0    0    1    1    0    0    0    0
    0    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
 101. 0.75  2.5  4.5  6.5  8.5 11.5 14.5 18.5 23.5
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
8046780467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
   12   11    9    2    2
Site Boundary
    1 1131    2 1156    3 1447    4 1281    5  943    6  919    7  919    8  919
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    9 1059   10 1531   11 2054   16 1131
Residence
   16 1478    2 1442    3 1606    4 1821    5 1571    7 1107    7 1714    8 1920
   10 2130   10 2109   11 2182
Garden
    1 2067    4 3445    5 2422    7 1110    8 1757    8 2355    9 3716   10 3477
   11 3602
Sheep
    8 7173   10 7238
Goat
    6 3704    8 4961
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

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1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:11

 PRINTOUT OF INPUT CARDS
0    1     00101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL A
     3         9    7    6   15    5    3    0
     4      10.00 101.00   2.26  -8.00    .00
     5       .000   .000   .000   .000   .000   .000   .000
     6       .000   .000  5.000  3.000  5.000  1.000 10.000  6.000  8.000  7.000  5.000  2.000  3.000   .000   .000   .000
     6      6.000  3.000 10.000 24.000  3.000  4.000  4.000  8.000  5.000  7.000 10.000 10.000 22.000 17.000 12.000  4.000
     6     29.000 35.000 46.000 42.000 42.000 56.000 63.000 59.000 62.000 68.000 58.000100.000 97.000133.000117.000 53.000
     6     53.000 63.000108.000102.000106.000279.000363.000243.000222.000199.000137.000158.000188.000221.000202.000137.000
     6     72.000 44.000131.000145.000141.000326.000422.000320.000203.000300.000174.000199.000146.000208.000198.000149.000
     6     72.000 48.000 79.000129.000181.000211.000124.000123.000 79.000256.000200.000163.000122.000127.000108.000115.000
     6     12.000 14.000 15.000 39.000116.000 57.000  7.000 10.000  9.000 68.000 79.000 20.000 42.000 33.000 30.000 37.000
     6     12.000  7.000  1.000  7.000 37.000  9.000   .000  1.000  1.000 11.000 18.000  5.000  3.000  5.000  4.000  8.000
     6       .000   .000   .000   .000  2.000   .000   .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000
     6       .000   .000   .000  1.000   .000  1.000  1.000   .000   .000  2.000   .000   .000   .000   .000   .000   .000
     6      3.000  2.000  2.000  1.000   .000  1.000  1.000  4.000  4.000  3.000  5.000  4.000 15.000  9.000  6.000  1.000
     6     30.000 23.000 12.000 18.000  7.000 17.000 32.000 14.000 19.000 25.000 28.000 38.000 38.000 45.000 43.000 36.000
     6     35.000 23.000 30.000 19.000 18.000 40.000 75.000 61.000 46.000 50.000 57.000 58.000 78.000 70.000 55.000 61.000
     6     34.000 20.000 19.000 28.000 25.000 37.000 51.000 39.000 24.000 82.000 58.000 71.000 51.000 43.000 43.000 42.000
     6     20.000 19.000 15.000 28.000 35.000 22.000 21.000 12.000 18.000 70.000 84.000 28.000 36.000 25.000 22.000 32.000
     6      7.000 12.000  3.000 12.000 17.000 13.000  4.000  2.000  2.000 30.000 43.000 13.000 11.000 14.000  6.000  9.000
     6      6.000  1.000  2.000  4.000  7.000  1.000   .000   .000   .000 10.000 25.000  2.000  1.000  2.000  2.000   .000
     6       .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  4.000   .000   .000   .000   .000   .000
     6       .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  1.000   .000   .000   .000   .000   .000
     6      2.000  5.000  4.000  4.000  1.000   .000  1.000   .000  5.000  7.000  4.000 12.000 14.000 10.000  6.000 12.000
     6     27.000 24.000 12.000  6.000  5.000 15.000 14.000 15.000 22.000 29.000 37.000 48.000 48.000 57.000 44.000 27.000
     6     42.000 30.000 28.000 11.000 20.000 37.000 46.000 39.000 39.000 50.000 51.000 57.000 52.000 48.000 36.000 60.000
     6     29.000 23.000 36.000 29.000 19.000 28.000 34.000 32.000 27.000 56.000 77.000 36.000 48.000 39.000 31.000 41.000
     6     30.000 21.000 27.000 42.000 28.000 30.000 14.000  6.000 20.000 74.000 77.000 44.000 26.000 27.000 22.000 13.000
     6     10.000 22.000  6.000 14.000 18.000 12.000  5.000  7.000  5.000 35.000 48.000 16.000 16.000 20.000  9.000  8.000
     6      6.000   .000  1.000 10.000 10.000  2.000  1.000  1.000   .000  8.000 45.000  6.000   .000  3.000  5.000  2.000
     6       .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000  6.000   .000   .000   .000   .000   .000
     6      1.000   .000  1.000  1.000  1.000  2.000  6.000  2.000  3.000  8.000  7.000  4.000  4.000  3.000   .000   .000
     6     48.000 29.000 26.000 12.000  6.000 11.000 11.000  8.000 11.000 31.000 36.000 56.000 77.000 71.000 55.000 42.000
     6    122.000169.000 90.000 51.000 47.000 73.000 55.000 60.000 77.000 74.000186.000330.000260.000216.000213.000189.000
     6    144.000180.000251.000131.000 93.000158.000162.000 93.000133.000194.000391.000431.000290.000256.000271.000290.000
     6    133.000131.000380.000240.000179.000194.000173.000103.000161.000256.000483.000333.000216.000180.000178.000223.000
     6    222.000133.000330.000324.000240.000195.000102.000 92.000126.000392.000585.000237.000160.000152.000115.000128.000
     6     99.000105.000 84.000123.000163.000 64.000 23.000 18.000 36.000171.000346.000 55.000 38.000 77.000 20.000 48.000
     6     31.000 34.000  4.000 43.000 79.000 30.000  9.000  2.000  3.000 76.000125.000 21.000  6.000 11.000  2.000 15.000
     6      4.000 10.000  2.000  4.000 26.000  1.000  1.000  2.000   .000  1.000 28.000  4.000   .000   .000   .000   .000
     6      2.000   .000  3.000  3.000  4.000   .000  2.000  1.000  8.000  9.000  4.000  6.000  5.000  3.000  4.000  2.000
     6     65.000 45.000 32.000 17.000 20.000 18.000 21.000 31.000 71.000 77.000128.000212.000193.000193.000140.000 74.000
     6    167.000225.000 74.000 48.000 54.000 98.000 83.000114.000202.000239.000464.000525.000306.000352.000408.000258.000
     6    166.000159.000210.000132.000131.000185.000164.000197.000267.000507.000340.000228.000142.000139.000131.000211.000
     6     92.000 60.000117.000126.000123.000182.000150.000142.000231.000452.000158.000 57.000 47.000 58.000 47.000 59.000
     6     56.000 39.000 35.000 67.000 91.000 82.000 87.000 94.000153.000423.000113.000 23.000 13.000 29.000 36.000 23.000
     6     13.000  6.000  9.000 13.000 55.000 35.000 11.000 14.000 34.000121.000 42.000  2.000  3.000  6.000  6.000  8.000
     6      7.000  2.000   .000  3.000 26.000 14.000  2.000   .000  7.000 21.000 10.000   .000  2.000  1.000  1.000  3.000
     6      1.000   .000   .000  3.000 10.000   .000   .000  2.000  1.000  3.000  3.000   .000  1.000  2.000   .000   .000
     6      2.000  1.000  1.000  1.000   .000  2.000  2.000  3.000  3.000  2.000  3.000  5.000  4.000  3.000  3.000  5.000
     6     48.000 32.000 15.000 10.000 12.000 13.000 13.000 40.000 68.000 99.000134.000203.000221.000265.000162.000 93.000
     6    149.000 66.000 24.000 14.000 18.000 42.000 42.000 72.000106.000177.000221.000215.000122.000212.000160.000144.000
     6     98.000 35.000 11.000 10.000 32.000 47.000 66.000 93.000 67.000141.000 26.000  6.000  7.000 14.000 15.000 47.000
     6     13.000  9.000  5.000 12.000 20.000 36.000 37.000 57.000 47.000 98.000 14.000  5.000  9.000  2.000  6.000  5.000
     6      8.000  3.000   .000  8.000 16.000 16.000 22.000 32.000 41.000 81.000  9.000  5.000  1.000  6.000  2.000  6.000
     6      1.000   .000   .000  2.000  8.000  5.000  7.000  7.000 15.000 14.000  2.000  1.000   .000  1.000   .000   .000
     6       .000   .000   .000   .000  8.000   .000  1.000  3.000  2.000  4.000   .000  5.000  1.000   .000   .000   .000
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     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  2.000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  2.000   .000  2.000   .000
     6      23.000 14.000  5.000  1.000  1.000  7.000  9.000  7.000 21.000 23.000 49.000128.000223.000333.000151.000 77.000
     6      63.000 12.000  5.000  4.000 10.000 27.000 37.000 21.000 17.000 60.000 49.000 81.000 49.000184.000 87.000 91.000
     6      20.000 10.000  2.000  2.000 10.000 27.000 37.000 31.000 18.000 29.000 11.000  2.000  2.000  3.000  1.000 19.000
     6       4.000   .000   .000  2.000 10.000 18.000 22.000 24.000  9.000 15.000  5.000   .000   .000  1.000  1.000   .000
     6       1.000   .000   .000   .000  8.000 13.000 20.000 18.000  5.000 16.000  7.000  5.000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000  1.000  3.000  5.000   .000   .000  1.000  1.000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     7        101.   .750  2.500  4.500  6.500  8.500 11.500 14.500 18.500 23.500   .000   .000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
    10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
    10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
    11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
    10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
    11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
    12         12    11     9     2     2
    13     Site Boundary
    14       1 1131.0  2 1156.0  3 1447.0  4 1281.0  5  943.0  6  919.0  7  919.0  8  919.0

  9 1059.0 10 1531.0 11 2054.0 16 1131.0
    13     Residence
    14      16 1478.0  2 1442.0  3 1606.0  4 1821.0  5 1571.0  7 1107.0  7 1714.0  8 1920.0

 10 2130.0 10 2109.0 11 2182.0
    13     Garden
    14       1 2067.0  4 3445.0  5 2422.0  7 1110.0  8 1757.0  8 2355.0  9 3716.0 10 3477.0

 11 3602.0
    13     Sheep
    14       8 7173.0 10 7238.0
    13     Goat
    14       6 3704.0  8 4961.0
    15     Ground Level/Radwaste Bldg
    16        .000   .000   10.0     .0  350.0   10.0   .00
    17         0    0    0
    15     Reactor Bldg/Fuel Bldg Stack
    16      17.780  2.400   52.6   48.0     .0   52.6   .00
    17         0    0    0
    15     Turbine Bldg Stack
    16      17.780  1.950   71.3   52.0     .0   71.3   .00
    17         0    0    0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:11

     Fermi COL A

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)       N     NNE     NE     ENE      E     ESE     SE     SSE      S     SSW     SW     WSW      W     WNW     NW     NNW  TOTAL
   .34         .000   .000   .010   .006   .010   .002   .020   .012   .016   .014   .010   .004   .006   .000   .000   .000   .110
  1.12         .012   .006   .020   .048   .006   .008   .008   .016   .010   .014   .020   .020   .044   .034   .024   .008   .298
  2.01         .058   .070   .092   .084   .084   .112   .126   .118   .124   .136   .116   .200   .194   .266   .234   .106  2.117
  2.91         .106   .126   .216   .204   .212   .557   .725   .485   .443   .397   .274   .316   .375   .441   .403   .274  5.554
  3.80         .144   .088   .262   .290   .282   .651   .843   .639   .405   .599   .347   .397   .292   .415   .395   .298  6.347
```

5.14	.144	.096	.158	.258	.361	.421	.248	.246	.158	.511	.399	.326	.244	.254	.216	.230	4.268
6.48	.024	.028	.030	.078	.232	.114	.014	.020	.018	.136	.158	.040	.084	.066	.060	.074	1.174
8.27	.024	.014	.002	.014	.074	.018	.000	.002	.002	.022	.036	.010	.006	.010	.008	.016	.258
10.51	.000	.000	.000	.000	.004	.000	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.010
TOTAL	.51	.43	.79	.98	1.26	1.88	1.98	1.54	1.18	1.83	1.36	1.31	1.24	1.49	1.34	1.00	20.14

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.002	.000	.002	.002	.000	.000	.004	.000	.000	.000	.000	.000	.000	.010
1.12	.006	.004	.004	.002	.000	.002	.002	.008	.008	.006	.010	.008	.030	.018	.012	.002	.122
2.01	.060	.046	.024	.036	.014	.034	.064	.028	.038	.050	.056	.076	.076	.090	.086	.072	.849
2.91	.070	.046	.060	.038	.036	.080	.150	.122	.092	.100	.114	.116	.156	.140	.110	.122	1.550
3.80	.068	.040	.038	.056	.050	.074	.102	.078	.048	.164	.116	.142	.102	.086	.086	.084	1.332
5.14	.040	.038	.030	.056	.070	.044	.042	.024	.036	.140	.168	.056	.072	.050	.044	.064	.973
6.48	.014	.024	.006	.024	.034	.026	.008	.004	.004	.060	.086	.026	.022	.028	.012	.018	.395
8.27	.012	.002	.004	.008	.014	.002	.000	.000	.000	.020	.050	.004	.002	.004	.004	.000	.126
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008	.000	.000	.000	.000	.000	.008
TOTAL	.27	.20	.17	.22	.22	.26	.37	.26	.23	.54	.61	.43	.46	.42	.35	.36	5.36

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.002	.000	.000	.000	.000	.000	.010
1.12	.004	.010	.008	.008	.002	.000	.002	.000	.010	.014	.008	.024	.028	.020	.012	.024	.174
2.01	.054	.048	.024	.012	.010	.030	.028	.030	.044	.058	.074	.096	.096	.114	.088	.054	.859
2.91	.084	.060	.056	.022	.040	.074	.092	.078	.078	.100	.102	.114	.104	.096	.072	.120	1.290
3.80	.058	.046	.072	.058	.038	.056	.068	.064	.054	.112	.154	.072	.096	.078	.062	.082	1.168
5.14	.060	.042	.054	.084	.056	.060	.028	.012	.040	.148	.154	.088	.052	.054	.044	.026	1.001
6.48	.020	.044	.012	.028	.036	.024	.010	.014	.010	.070	.096	.032	.032	.040	.018	.016	.501
8.27	.012	.000	.002	.020	.020	.004	.002	.002	.000	.016	.090	.012	.000	.006	.010	.004	.200
10.51	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.012	.000	.000	.000	.000	.000	.018
TOTAL	.29	.25	.23	.24	.20	.25	.23	.20	.24	.52	.69	.44	.41	.41	.31	.33	5.22

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.002	.000	.002	.002	.002	.004	.012	.004	.006	.016	.014	.008	.008	.006	.000	.000	.086
1.12	.096	.058	.052	.024	.012	.022	.022	.016	.022	.062	.072	.112	.154	.142	.110	.084	1.058
2.01	.244	.338	.180	.102	.094	.146	.110	.120	.154	.148	.371	.659	.519	.431	.425	.377	4.418
2.91	.288	.359	.501	.262	.186	.316	.324	.186	.266	.387	.781	.861	.579	.511	.541	.579	6.926
3.80	.266	.262	.759	.479	.357	.387	.346	.206	.322	.511	.965	.665	.431	.359	.355	.445	7.116
5.14	.443	.266	.659	.647	.479	.389	.204	.184	.252	.783	1.168	.473	.320	.304	.230	.256	7.056
6.48	.198	.210	.168	.246	.326	.128	.046	.036	.072	.342	.691	.110	.076	.154	.040	.096	2.936
8.27	.062	.068	.008	.086	.158	.060	.018	.004	.006	.152	.250	.042	.012	.022	.004	.030	.981
10.51	.008	.020	.004	.008	.052	.002	.002	.004	.000	.002	.056	.008	.000	.000	.000	.000	.166
TOTAL	1.61	1.58	2.33	1.86	1.67	1.45	1.08	.76	1.10	2.40	4.37	2.94	2.10	1.93	1.71	1.87	30.74

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.000	.006	.006	.008	.000	.004	.002	.016	.018	.008	.012	.010	.006	.008	.004	.112
1.12	.130	.090	.064	.034	.040	.036	.042	.062	.142	.154	.256	.423	.385	.385	.280	.148	2.670
2.01	.334	.449	.148	.096	.108	.196	.166	.228	.403	.477	.927	1.048	.611	.703	.815	.515	7.224
2.91	.332	.318	.419	.264	.262	.369	.328	.393	.533	1.013	.679	.455	.284	.278	.262	.421	6.608
3.80	.184	.120	.234	.252	.246	.363	.300	.284	.461	.903	.316	.114	.094	.116	.094	.118	4.196
5.14	.112	.078	.070	.134	.182	.164	.174	.188	.306	.845	.226	.046	.026	.058	.072	.046	2.724
6.48	.026	.012	.018	.026	.110	.070	.022	.028	.068	.242	.084	.004	.006	.012	.012	.016	.755
8.27	.014	.004	.000	.006	.052	.028	.004	.000	.014	.042	.020	.000	.004	.002	.002	.006	.198
10.51	.002	.000	.000	.006	.020	.000	.000	.004	.002	.006	.006	.000	.002	.004	.000	.000	.052
TOTAL	1.14	1.07	.96	.82	1.03	1.23	1.04	1.19	1.95	3.70	2.52	2.10	1.42	1.56	1.54	1.27	24.54

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.002	.002	.002	.000	.004	.004	.006	.006	.004	.006	.010	.008	.006	.006	.010	.080

1.12	.096	.064	.030	.020	.024	.026	.026	.080	.136	.198	.268	.405	.441	.529	.324	.186	2.852
2.01	.298	.132	.048	.028	.036	.084	.084	.144	.212	.353	.441	.429	.244	.423	.320	.288	3.563
2.91	.196	.070	.022	.020	.064	.094	.132	.186	.134	.282	.052	.012	.014	.028	.030	.094	1.428
3.80	.026	.018	.010	.024	.040	.072	.074	.114	.094	.196	.028	.010	.018	.004	.012	.010	.749
5.14	.016	.006	.000	.016	.032	.032	.044	.064	.082	.162	.018	.010	.002	.012	.004	.012	.511
6.48	.002	.000	.000	.004	.016	.010	.014	.014	.030	.028	.004	.002	.000	.002	.000	.000	.126
8.27	.000	.000	.000	.000	.016	.000	.002	.006	.004	.008	.000	.010	.002	.000	.000	.000	.048
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.004	.000	.000	.000	.010
TOTAL	.64	.29	.11	.11	.23	.32	.38	.61	.70	1.23	.82	.89	.73	1.00	.69	.60	9.37

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.004	.000	.004	.000	.016
1.12	.046	.028	.010	.002	.002	.014	.018	.014	.042	.046	.098	.256	.445	.665	.302	.154	2.141
2.01	.126	.024	.010	.008	.020	.054	.074	.042	.034	.120	.098	.162	.098	.367	.174	.182	1.592
2.91	.040	.020	.004	.004	.020	.054	.074	.062	.036	.058	.022	.004	.004	.006	.002	.038	.447
3.80	.008	.000	.000	.004	.020	.036	.044	.048	.018	.030	.010	.000	.000	.002	.002	.000	.222
5.14	.002	.000	.000	.000	.016	.026	.040	.036	.010	.032	.014	.010	.000	.000	.000	.000	.186
6.48	.000	.000	.000	.000	.004	.002	.006	.010	.000	.000	.002	.002	.000	.000	.000	.000	.026
8.27	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
10.51	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
TOTAL	.22	.07	.02	.02	.08	.19	.26	.21	.14	.29	.25	.44	.55	1.04	.48	.37	4.63

TOTAL HOURS CONSIDERED ARE 50072
0WIND MEASURED AT 10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.7	3.9	4.6	4.2	4.7	5.6	5.3	4.8	5.5	10.5	10.6	8.5	6.9	7.8	6.4	5.8	100.0

0OVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.335	1.118	2.012	2.906	3.800	5.141	6.482	8.270	10.505
AVE WIND SPEED (M/S):	.168	.726	1.565	2.459	3.353	4.470	5.812	7.376	9.388
WIND SPEED FREQUENCY:	.42	9.31	20.62	23.80	21.13	16.72	5.91	1.81	.27

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSESS IS .447
0DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500

S	4.212E-05	1.224E-05	5.968E-06	2.845E-06	1.070E-06	5.615E-07	3.493E-07	2.408E-07	1.777E-07	1.377E-07	1.106E-07
SSW	2.990E-05	8.693E-06	4.257E-06	2.027E-06	7.586E-07	3.959E-07	2.451E-07	1.682E-07	1.237E-07	9.553E-08	7.650E-08
SW	2.490E-05	7.149E-06	3.497E-06	1.661E-06	6.193E-07	3.216E-07	1.982E-07	1.355E-07	9.926E-08	7.638E-08	6.096E-08
WSW	1.860E-05	5.285E-06	2.573E-06	1.220E-06	4.547E-07	2.362E-07	1.456E-07	9.955E-08	7.295E-08	5.616E-08	4.484E-08
W	2.015E-05	5.745E-06	2.796E-06	1.328E-06	4.974E-07	2.597E-07	1.608E-07	1.104E-07	8.116E-08	6.266E-08	5.018E-08
WNW	2.792E-05	7.916E-06	3.832E-06	1.820E-06	6.839E-07	3.582E-07	2.225E-07	1.532E-07	1.130E-07	8.746E-08	7.020E-08
NW	2.942E-05	8.268E-06	3.981E-06	1.889E-06	7.115E-07	3.736E-07	2.326E-07	1.605E-07	1.185E-07	9.191E-08	7.388E-08
NNW	3.201E-05	9.137E-06	4.425E-06	2.105E-06	7.945E-07	4.181E-07	2.607E-07	1.802E-07	1.333E-07	1.035E-07	8.324E-08
N	4.464E-05	1.291E-05	6.302E-06	3.000E-06	1.130E-06	5.929E-07	3.689E-07	2.544E-07	1.879E-07	1.456E-07	1.170E-07
NNE	7.320E-05	2.121E-05	1.036E-05	4.931E-06	1.854E-06	9.724E-07	6.046E-07	4.166E-07	3.074E-07	2.381E-07	1.912E-07
NE	8.036E-05	2.333E-05	1.140E-05	5.430E-06	2.038E-06	1.067E-06	6.621E-07	4.555E-07	3.356E-07	2.596E-07	2.082E-07
ENE	9.779E-05	2.840E-05	1.384E-05	6.605E-06	2.491E-06	1.309E-06	8.159E-07	5.633E-07	4.164E-07	3.230E-07	2.597E-07
E	9.458E-05	2.735E-05	1.326E-05	6.333E-06	2.396E-06	1.264E-06	7.898E-07	5.468E-07	4.051E-07	3.150E-07	2.538E-07
ESE	1.214E-04	3.511E-05	1.698E-05	8.117E-06	3.083E-06	1.632E-06	1.024E-06	7.107E-07	5.279E-07	4.113E-07	3.321E-07
SE	7.993E-05	2.313E-05	1.123E-05	5.359E-06	2.028E-06	1.069E-06	6.683E-07	4.627E-07	3.428E-07	2.665E-07	2.147E-07
SSE	5.915E-05	1.711E-05	8.318E-06	3.968E-06	1.497E-06	7.872E-07	4.908E-07	3.391E-07	2.507E-07	1.946E-07	1.566E-07

over water

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.136E-08	4.677E-08	3.031E-08	1.743E-08	1.184E-08	8.802E-09	6.917E-09	5.648E-09	4.742E-09	4.067E-09	3.546E-09
SSW	6.301E-08	3.189E-08	2.049E-08	1.164E-08	7.844E-09	5.790E-09	4.525E-09	3.677E-09	3.075E-09	2.627E-09	2.284E-09
SW	5.007E-08	2.505E-08	1.595E-08	8.949E-09	5.975E-09	4.379E-09	3.403E-09	2.752E-09	2.292E-09	1.951E-09	1.691E-09
WSW	3.685E-08	1.849E-08	1.180E-08	6.646E-09	4.452E-09	3.271E-09	2.547E-09	2.064E-09	1.722E-09	1.468E-09	1.274E-09
W	4.134E-08	2.093E-08	1.345E-08	7.650E-09	5.158E-09	3.809E-09	2.979E-09	2.422E-09	2.027E-09	1.733E-09	1.507E-09
WNW	5.795E-08	2.962E-08	1.917E-08	1.102E-08	7.488E-09	5.565E-09	4.375E-09	3.574E-09	3.002E-09	2.575E-09	2.247E-09
NW	6.109E-08	3.143E-08	2.045E-08	1.183E-08	8.083E-09	6.032E-09	4.757E-09	3.897E-09	3.281E-09	2.822E-09	2.466E-09
NNW	6.888E-08	3.550E-08	2.312E-08	1.339E-08	9.147E-09	6.824E-09	5.380E-09	4.405E-09	3.707E-09	3.186E-09	2.784E-09
N	9.663E-08	4.948E-08	3.206E-08	1.844E-08	1.252E-08	9.303E-09	7.307E-09	5.964E-09	5.006E-09	4.292E-09	3.741E-09
NNE	1.579E-07	8.075E-08	5.228E-08	3.002E-08	2.038E-08	1.513E-08	1.188E-08	9.690E-09	8.130E-09	6.968E-09	6.072E-09
NE	1.718E-07	8.745E-08	5.643E-08	3.226E-08	2.183E-08	1.617E-08	1.267E-08	1.032E-08	8.649E-09	7.404E-09	6.446E-09
ENE	2.147E-07	1.103E-07	7.165E-08	4.135E-08	2.817E-08	2.097E-08	1.650E-08	1.349E-08	1.134E-08	9.734E-09	8.496E-09
E	2.102E-07	1.088E-07	7.111E-08	4.140E-08	2.838E-08	2.123E-08	1.678E-08	1.376E-08	1.161E-08	9.990E-09	8.740E-09
ESE	2.756E-07	1.437E-07	9.437E-08	5.533E-08	3.811E-08	2.862E-08	2.269E-08	1.866E-08	1.577E-08	1.360E-08	1.192E-08
SE	1.778E-07	9.200E-08	6.009E-08	3.495E-08	2.394E-08	1.790E-08	1.414E-08	1.159E-08	9.770E-09	8.407E-09	7.352E-09
SSE	1.295E-07	6.668E-08	4.340E-08	2.512E-08	1.715E-08	1.279E-08	1.008E-08	8.257E-09	6.949E-09	5.972E-09	5.218E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.973E-06	1.239E-06	3.625E-07	1.805E-07	1.115E-07	4.936E-08	1.781E-08	8.859E-09	5.665E-09	4.074E-09
SSW	4.251E-06	8.791E-07	2.546E-07	1.257E-07	7.714E-08	3.374E-08	1.192E-08	5.832E-09	3.690E-09	2.633E-09
SW	3.493E-06	7.185E-07	2.060E-07	1.009E-07	6.150E-08	2.657E-08	9.183E-09	4.414E-09	2.763E-09	1.956E-09
WSW	2.574E-06	5.276E-07	1.513E-07	7.415E-08	4.523E-08	1.960E-08	6.817E-09	3.296E-09	2.072E-09	1.471E-09
W	2.799E-06	5.763E-07	1.670E-07	8.246E-08	5.060E-08	2.214E-08	7.832E-09	3.837E-09	2.431E-09	1.736E-09
WNW	3.845E-06	7.916E-07	2.310E-07	1.148E-07	7.078E-08	3.127E-08	1.126E-08	5.602E-09	3.585E-09	2.580E-09
NW	4.004E-06	8.230E-07	2.413E-07	1.204E-07	7.448E-08	3.314E-08	1.208E-08	6.069E-09	3.908E-09	2.826E-09
NNW	4.441E-06	9.184E-07	2.705E-07	1.353E-07	8.391E-08	3.741E-08	1.367E-08	6.866E-09	4.418E-09	3.192E-09

N	6.304E-06	1.307E-06	3.828E-07	1.908E-07	1.179E-07	5.221E-08	1.884E-08	9.364E-09	5.983E-09	4.299E-09
NNE	1.036E-05	2.146E-06	6.275E-07	3.122E-07	1.928E-07	8.524E-08	3.068E-08	1.523E-08	9.720E-09	6.980E-09
NE	1.140E-05	2.360E-06	6.874E-07	3.409E-07	2.100E-07	9.240E-08	3.300E-08	1.628E-08	1.036E-08	7.418E-09
ENE	1.386E-05	2.880E-06	8.465E-07	4.228E-07	2.618E-07	1.163E-07	4.223E-08	2.110E-08	1.353E-08	9.751E-09
E	1.331E-05	2.767E-06	8.189E-07	4.112E-07	2.558E-07	1.146E-07	4.221E-08	2.135E-08	1.380E-08	1.001E-08
ESE	1.707E-05	3.557E-06	1.061E-06	5.357E-07	3.347E-07	1.511E-07	5.635E-08	2.878E-08	1.871E-08	1.362E-08
SE	1.126E-05	2.342E-06	6.930E-07	3.480E-07	2.164E-07	9.689E-08	3.564E-08	1.800E-08	1.162E-08	8.420E-09
SSE	8.339E-06	1.730E-06	5.092E-07	2.546E-07	1.578E-07	7.029E-08	2.564E-08	1.287E-08	8.281E-09	5.982E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.206E-05	1.220E-05	5.945E-06	2.830E-06	1.062E-06	5.556E-07	3.447E-07	2.370E-07	1.745E-07	1.348E-07	1.080E-07
SSW	2.987E-05	8.673E-06	4.243E-06	2.017E-06	7.534E-07	3.923E-07	2.423E-07	1.659E-07	1.217E-07	9.378E-08	7.492E-08
SW	2.487E-05	7.132E-06	3.484E-06	1.653E-06	6.147E-07	3.184E-07	1.957E-07	1.335E-07	9.752E-08	7.485E-08	5.960E-08
WSW	1.858E-05	5.271E-06	2.563E-06	1.214E-06	4.512E-07	2.338E-07	1.437E-07	9.803E-08	7.165E-08	5.501E-08	4.382E-08
W	2.013E-05	5.732E-06	2.786E-06	1.322E-06	4.940E-07	2.573E-07	1.589E-07	1.088E-07	7.986E-08	6.152E-08	4.915E-08
WNW	2.789E-05	7.899E-06	3.820E-06	1.812E-06	6.794E-07	3.551E-07	2.201E-07	1.512E-07	1.113E-07	8.595E-08	6.884E-08
NW	2.938E-05	8.244E-06	3.964E-06	1.878E-06	7.055E-07	3.694E-07	2.293E-07	1.578E-07	1.162E-07	8.989E-08	7.206E-08
NNW	3.196E-05	9.110E-06	4.406E-06	2.093E-06	7.877E-07	4.133E-07	2.570E-07	1.771E-07	1.306E-07	1.011E-07	8.111E-08
N	4.457E-05	1.287E-05	6.271E-06	2.981E-06	1.119E-06	5.852E-07	3.630E-07	2.495E-07	1.836E-07	1.419E-07	1.136E-07
NNE	7.310E-05	2.116E-05	1.032E-05	4.904E-06	1.839E-06	9.618E-07	5.964E-07	4.099E-07	3.017E-07	2.330E-07	1.866E-07
NE	8.025E-05	2.326E-05	1.135E-05	5.399E-06	2.021E-06	1.054E-06	6.525E-07	4.476E-07	3.289E-07	2.536E-07	2.028E-07
ENE	9.763E-05	2.830E-05	1.377E-05	6.560E-06	2.465E-06	1.291E-06	8.019E-07	5.518E-07	4.064E-07	3.142E-07	2.517E-07
E	9.441E-05	2.725E-05	1.319E-05	6.285E-06	2.369E-06	1.245E-06	7.750E-07	5.345E-07	3.945E-07	3.056E-07	2.453E-07
ESE	1.212E-04	3.499E-05	1.689E-05	8.063E-06	3.052E-06	1.610E-06	1.006E-06	6.964E-07	5.156E-07	4.004E-07	3.222E-07
SE	7.980E-05	2.305E-05	1.117E-05	5.323E-06	2.007E-06	1.055E-06	6.570E-07	4.532E-07	3.346E-07	2.592E-07	2.081E-07
SSE	5.906E-05	1.706E-05	8.280E-06	3.944E-06	1.483E-06	7.777E-07	4.834E-07	3.329E-07	2.454E-07	1.899E-07	1.523E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.898E-08	4.496E-08	2.876E-08	1.613E-08	1.069E-08	7.754E-09	5.949E-09	4.745E-09	3.893E-09	3.264E-09	2.783E-09
SSW	6.157E-08	3.080E-08	1.956E-08	1.085E-08	7.146E-09	5.154E-09	3.937E-09	3.128E-09	2.558E-09	2.138E-09	1.818E-09
SW	4.882E-08	2.411E-08	1.517E-08	8.300E-09	5.411E-09	3.875E-09	2.944E-09	2.330E-09	1.899E-09	1.583E-09	1.344E-09
WSW	3.592E-08	1.779E-08	1.122E-08	6.165E-09	4.034E-09	2.899E-09	2.210E-09	1.755E-09	1.435E-09	1.201E-09	1.023E-09
W	4.040E-08	2.023E-08	1.286E-08	7.160E-09	4.731E-09	3.427E-09	2.631E-09	2.101E-09	1.728E-09	1.453E-09	1.243E-09
WNW	5.671E-08	2.868E-08	1.837E-08	1.035E-08	6.897E-09	5.030E-09	3.882E-09	3.115E-09	2.571E-09	2.168E-09	1.860E-09
NW	5.943E-08	3.018E-08	1.939E-08	1.095E-08	7.312E-09	5.339E-09	4.123E-09	3.311E-09	2.734E-09	2.307E-09	1.980E-09
NNW	6.692E-08	3.401E-08	2.185E-08	1.232E-08	8.207E-09	5.976E-09	4.602E-09	3.685E-09	3.034E-09	2.553E-09	2.186E-09
N	9.356E-08	4.717E-08	3.010E-08	1.681E-08	1.110E-08	8.020E-09	6.136E-09	4.882E-09	3.997E-09	3.345E-09	2.848E-09
NNE	1.537E-07	7.761E-08	4.961E-08	2.780E-08	1.843E-08	1.337E-08	1.027E-08	8.200E-09	6.737E-09	5.656E-09	4.831E-09
NE	1.668E-07	8.371E-08	5.325E-08	2.959E-08	1.948E-08	1.404E-08	1.071E-08	8.502E-09	6.944E-09	5.797E-09	4.923E-09
ENE	2.074E-07	1.047E-07	6.687E-08	3.731E-08	2.459E-08	1.772E-08	1.351E-08	1.070E-08	8.720E-09	7.261E-09	6.149E-09
E	2.024E-07	1.028E-07	6.595E-08	3.700E-08	2.446E-08	1.765E-08	1.346E-08	1.067E-08	8.689E-09	7.228E-09	6.113E-09
ESE	2.665E-07	1.366E-07	8.822E-08	5.002E-08	3.333E-08	2.422E-08	1.859E-08	1.480E-08	1.211E-08	1.012E-08	8.587E-09
SE	1.718E-07	8.736E-08	5.609E-08	3.154E-08	2.089E-08	1.511E-08	1.156E-08	9.180E-09	7.496E-09	6.252E-09	5.302E-09
SSE	1.256E-07	6.368E-08	4.082E-08	2.293E-08	1.521E-08	1.102E-08	8.444E-09	6.723E-09	5.505E-09	4.604E-09	3.916E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 10.00 REP. WIND HEIGHT (METERS) 10.0

DIAMETER (METERS) .00
EXIT VELOCITY (METERS) .00

BUILDING HEIGHT (METERS) .0
BLDG.MIN.CRS.SEC.AREA (SQ.METERS) 350.0
HEAT EMISSION RATE (CAL/SEC) .0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.951E-06	1.230E-06	3.579E-07	1.772E-07	1.089E-07	4.754E-08	1.652E-08	7.815E-09	4.765E-09	3.272E-09
SSW	4.238E-06	8.738E-07	2.517E-07	1.237E-07	7.556E-08	3.264E-08	1.114E-08	5.199E-09	3.142E-09	2.144E-09
SW	3.481E-06	7.138E-07	2.036E-07	9.916E-08	6.013E-08	2.563E-08	8.542E-09	3.912E-09	2.341E-09	1.588E-09
WSW	2.565E-06	5.240E-07	1.495E-07	7.285E-08	4.421E-08	1.890E-08	6.340E-09	2.926E-09	1.763E-09	1.204E-09
W	2.790E-06	5.727E-07	1.651E-07	8.115E-08	4.957E-08	2.143E-08	7.347E-09	3.456E-09	2.110E-09	1.457E-09
WNW	3.834E-06	7.869E-07	2.286E-07	1.130E-07	6.942E-08	3.033E-08	1.060E-08	5.069E-09	3.127E-09	2.174E-09
NW	3.988E-06	8.167E-07	2.381E-07	1.181E-07	7.267E-08	3.188E-08	1.121E-08	5.379E-09	3.323E-09	2.313E-09
NNW	4.424E-06	9.113E-07	2.667E-07	1.326E-07	8.178E-08	3.592E-08	1.261E-08	6.021E-09	3.699E-09	2.560E-09
N	6.276E-06	1.295E-06	3.769E-07	1.865E-07	1.146E-07	4.989E-08	1.722E-08	8.087E-09	4.903E-09	3.354E-09
NNE	1.032E-05	2.130E-06	6.193E-07	3.065E-07	1.882E-07	8.208E-08	2.848E-08	1.348E-08	8.234E-09	5.671E-09
NE	1.135E-05	2.342E-06	6.778E-07	3.341E-07	2.046E-07	8.864E-08	3.035E-08	1.416E-08	8.540E-09	5.813E-09
ENE	1.380E-05	2.853E-06	8.324E-07	4.128E-07	2.538E-07	1.107E-07	3.823E-08	1.786E-08	1.075E-08	7.281E-09
E	1.325E-05	2.740E-06	8.041E-07	4.006E-07	2.473E-07	1.086E-07	3.786E-08	1.779E-08	1.071E-08	7.248E-09
ESE	1.699E-05	3.525E-06	1.043E-06	5.234E-07	3.247E-07	1.440E-07	5.109E-08	2.440E-08	1.486E-08	1.014E-08
SE	1.121E-05	2.321E-06	6.816E-07	3.398E-07	2.098E-07	9.222E-08	3.226E-08	1.523E-08	9.218E-09	6.269E-09
SSE	8.305E-06	1.716E-06	5.017E-07	2.493E-07	1.535E-07	6.728E-08	2.347E-08	1.111E-08	6.751E-09	4.616E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

SECTOR	DISTANCE IN MILES FROM THE SITE .250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.985E-05	1.116E-05	5.313E-06	2.487E-06	9.071E-07	4.636E-07	2.819E-07	1.904E-07	1.379E-07	1.051E-07	8.306E-08
SSW	2.829E-05	7.933E-06	3.790E-06	1.772E-06	6.430E-07	3.270E-07	1.979E-07	1.331E-07	9.610E-08	7.295E-08	5.750E-08
SW	2.355E-05	6.524E-06	3.113E-06	1.452E-06	5.249E-07	2.656E-07	1.600E-07	1.072E-07	7.706E-08	5.829E-08	4.579E-08
WSW	1.760E-05	4.822E-06	2.290E-06	1.066E-06	3.853E-07	1.950E-07	1.175E-07	7.873E-08	5.663E-08	4.285E-08	3.368E-08
W	1.907E-05	5.243E-06	2.489E-06	1.161E-06	4.216E-07	2.144E-07	1.298E-07	8.732E-08	6.303E-08	4.785E-08	3.771E-08
WNW	2.641E-05	7.225E-06	3.412E-06	1.591E-06	5.798E-07	2.959E-07	1.797E-07	1.213E-07	8.778E-08	6.681E-08	5.278E-08
NW	2.783E-05	7.544E-06	3.543E-06	1.651E-06	6.028E-07	3.084E-07	1.876E-07	1.268E-07	9.197E-08	7.010E-08	5.546E-08
NNW	3.028E-05	8.337E-06	3.939E-06	1.840E-06	6.731E-07	3.450E-07	2.103E-07	1.424E-07	1.034E-07	7.889E-08	6.247E-08
N	4.223E-05	1.178E-05	5.608E-06	2.621E-06	9.566E-07	4.891E-07	2.975E-07	2.010E-07	1.456E-07	1.109E-07	8.769E-08
NNE	6.925E-05	1.936E-05	9.220E-06	4.310E-06	1.571E-06	8.027E-07	4.878E-07	3.294E-07	2.386E-07	1.817E-07	1.436E-07
NE	7.602E-05	2.128E-05	1.015E-05	4.745E-06	1.727E-06	8.804E-07	5.341E-07	3.600E-07	2.604E-07	1.980E-07	1.563E-07
ENE	9.251E-05	2.591E-05	1.232E-05	5.770E-06	2.109E-06	1.080E-06	6.577E-07	4.448E-07	3.227E-07	2.460E-07	1.946E-07
E	8.947E-05	2.495E-05	1.180E-05	5.532E-06	2.028E-06	1.042E-06	6.363E-07	4.315E-07	3.137E-07	2.397E-07	1.900E-07
ESE	1.149E-04	3.203E-05	1.511E-05	7.092E-06	2.611E-06	1.346E-06	8.251E-07	5.612E-07	4.092E-07	3.134E-07	2.490E-07
SE	7.561E-05	2.110E-05	9.990E-06	4.682E-06	1.717E-06	8.820E-07	5.387E-07	3.653E-07	2.656E-07	2.029E-07	1.609E-07
SSE	5.596E-05	1.562E-05	7.403E-06	3.467E-06	1.268E-06	6.496E-07	3.959E-07	2.679E-07	1.945E-07	1.483E-07	1.174E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.759E-08	3.260E-08	2.006E-08	1.060E-08	6.713E-09	4.692E-09	3.488E-09	2.707E-09	2.167E-09	1.777E-09	1.485E-09
SSW	4.666E-08	2.226E-08	1.358E-08	7.095E-09	4.459E-09	3.097E-09	2.292E-09	1.771E-09	1.412E-09	1.154E-09	9.618E-10
SW	3.705E-08	1.746E-08	1.056E-08	5.442E-09	3.387E-09	2.334E-09	1.716E-09	1.319E-09	1.047E-09	8.522E-10	7.074E-10
WSW	2.727E-08	1.289E-08	7.811E-09	4.040E-09	2.522E-09	1.743E-09	1.284E-09	9.890E-10	7.866E-10	6.414E-10	5.332E-10
W	3.061E-08	1.461E-08	8.919E-09	4.664E-09	2.934E-09	2.040E-09	1.511E-09	1.169E-09	9.337E-10	7.642E-10	6.375E-10
WNW	4.293E-08	2.069E-08	1.272E-08	6.726E-09	4.267E-09	2.987E-09	2.225E-09	1.730E-09	1.387E-09	1.140E-09	9.539E-10
NW	4.518E-08	2.190E-08	1.352E-08	7.190E-09	4.578E-09	3.214E-09	2.399E-09	1.868E-09	1.500E-09	1.234E-09	1.034E-09
NNW	5.092E-08	2.472E-08	1.528E-08	8.123E-09	5.169E-09	3.624E-09	2.702E-09	2.102E-09	1.686E-09	1.385E-09	1.159E-09
N	7.136E-08	3.440E-08	2.115E-08	1.115E-08	7.052E-09	4.919E-09	3.651E-09	2.828E-09	2.261E-09	1.851E-09	1.544E-09
NNE	1.168E-07	5.627E-08	3.459E-08	1.825E-08	1.155E-08	8.064E-09	5.991E-09	4.646E-09	3.718E-09	3.047E-09	2.545E-09
NE	1.270E-07	6.088E-08	3.728E-08	1.956E-08	1.233E-08	8.578E-09	6.354E-09	4.914E-09	3.922E-09	3.207E-09	2.672E-09
ENE	1.585E-07	7.661E-08	4.719E-08	2.496E-08	1.581E-08	1.104E-08	8.199E-09	6.354E-09	5.080E-09	4.159E-09	3.469E-09
E	1.550E-07	7.549E-08	4.675E-08	2.492E-08	1.587E-08	1.113E-08	8.294E-09	6.445E-09	5.164E-09	4.236E-09	3.539E-09
ESE	2.035E-07	9.985E-08	6.219E-08	3.343E-08	2.142E-08	1.510E-08	1.130E-08	8.812E-09	7.084E-09	5.828E-09	4.883E-09
SE	1.312E-07	6.390E-08	3.958E-08	2.110E-08	1.344E-08	9.425E-09	7.026E-09	5.462E-09	4.378E-09	3.593E-09	3.003E-09
SSE	9.570E-08	4.639E-08	2.865E-08	1.521E-08	9.670E-09	6.774E-09	5.046E-09	3.921E-09	3.142E-09	2.578E-09	2.155E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.357E-06	1.061E-06	2.937E-07	1.404E-07	8.385E-08	3.480E-08	1.097E-08	4.749E-09	2.725E-09	1.784E-09
SSW	3.814E-06	7.533E-07	2.064E-07	9.786E-08	5.806E-08	2.383E-08	7.366E-09	3.138E-09	1.783E-09	1.160E-09
SW	3.133E-06	6.157E-07	1.670E-07	7.851E-08	4.626E-08	1.875E-08	5.666E-09	2.368E-09	1.329E-09	8.563E-10
WSW	2.309E-06	4.520E-07	1.226E-07	5.770E-08	3.402E-08	1.383E-08	4.204E-09	1.767E-09	9.963E-10	6.443E-10
W	2.511E-06	4.938E-07	1.354E-07	6.419E-08	3.809E-08	1.564E-08	4.841E-09	2.067E-09	1.177E-09	7.675E-10
WNW	3.450E-06	6.783E-07	1.873E-07	8.935E-08	5.329E-08	2.209E-08	6.965E-09	3.023E-09	1.741E-09	1.144E-09
NW	3.591E-06	7.048E-07	1.955E-07	9.360E-08	5.599E-08	2.335E-08	7.437E-09	3.252E-09	1.880E-09	1.239E-09
NNW	3.983E-06	7.865E-07	2.191E-07	1.052E-07	6.306E-08	2.634E-08	8.400E-09	3.667E-09	2.115E-09	1.390E-09
N	5.653E-06	1.119E-06	3.100E-07	1.482E-07	8.853E-08	3.672E-08	1.155E-08	4.981E-09	2.847E-09	1.859E-09
NNE	9.290E-06	1.838E-06	5.084E-07	2.428E-07	1.449E-07	6.009E-08	1.890E-08	8.164E-09	4.677E-09	3.060E-09
NE	1.022E-05	2.021E-06	5.568E-07	2.651E-07	1.578E-07	6.508E-08	2.028E-08	8.688E-09	4.948E-09	3.221E-09
ENE	1.243E-05	2.465E-06	6.852E-07	3.284E-07	1.965E-07	8.173E-08	2.583E-08	1.117E-08	6.396E-09	4.176E-09
E	1.194E-05	2.368E-06	6.625E-07	3.192E-07	1.918E-07	8.039E-08	2.575E-08	1.126E-08	6.485E-09	4.253E-09
ESE	1.531E-05	3.045E-06	8.586E-07	4.161E-07	2.512E-07	1.061E-07	3.448E-08	1.526E-08	8.864E-09	5.850E-09
SE	1.010E-05	2.005E-06	5.609E-07	2.702E-07	1.624E-07	6.806E-08	2.180E-08	9.535E-09	5.496E-09	3.607E-09
SSE	7.479E-06	1.482E-06	4.124E-07	1.979E-07	1.185E-07	4.946E-08	1.573E-08	6.855E-09	3.946E-09	2.589E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Ground Level/Radwaste Bldg

NE	4.171E-08	8.543E-09	2.230E-09	1.002E-09	5.666E-10	2.179E-10	6.304E-11	2.498E-11	1.334E-11	8.258E-12
ENE	3.360E-08	6.882E-09	1.797E-09	8.069E-10	4.564E-10	1.755E-10	5.078E-11	2.013E-11	1.075E-11	6.652E-12
E	2.718E-08	5.568E-09	1.454E-09	6.528E-10	3.693E-10	1.420E-10	4.109E-11	1.628E-11	8.696E-12	5.382E-12
ESE	3.084E-08	6.317E-09	1.649E-09	7.407E-10	4.190E-10	1.611E-10	4.662E-11	1.848E-11	9.866E-12	6.107E-12
SE	2.526E-08	5.174E-09	1.351E-09	6.067E-10	3.432E-10	1.320E-10	3.818E-11	1.513E-11	8.081E-12	5.002E-12
SSE	2.282E-08	4.674E-09	1.220E-09	5.480E-10	3.100E-10	1.192E-10	3.449E-11	1.367E-11	7.300E-12	4.518E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

0Fermi COL A

0Ground Level/Radwaste Bldg
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+							
+							
				UNDEPLETED	UNDEPLETED	DEPLETED	
	Site Boundary	S	.70	6.7E-06	6.7E-06	6.0E-06	2.1E-08
	Site Boundary	SSW	.72	4.6E-06	4.6E-06	4.1E-06	1.7E-08
	Site Boundary	SW	.90	2.2E-06	2.2E-06	1.9E-06	1.2E-08
	Site Boundary	WSW	.80	2.2E-06	2.2E-06	2.0E-06	1.5E-08
	Site Boundary	W	.59	4.3E-06	4.3E-06	3.9E-06	2.8E-08
	Site Boundary	WNW	.57	6.2E-06	6.2E-06	5.6E-06	3.5E-08
	Site Boundary	NW	.57	6.5E-06	6.5E-06	5.9E-06	3.4E-08
	Site Boundary	NNW	.57	7.2E-06	7.2E-06	6.5E-06	3.0E-08
	Site Boundary	N	.66	7.9E-06	7.9E-06	7.1E-06	2.8E-08
	Site Boundary	NNE	.95	5.6E-06	5.6E-06	4.9E-06	2.3E-08
	Site Boundary	NE	1.28	3.0E-06	3.0E-06	2.6E-06	1.1E-08
	Site Boundary	SSE	.70	9.3E-06	9.3E-06	8.3E-06	2.6E-08
	Residence	SSE	.92	4.9E-06	4.9E-06	4.3E-06	1.4E-08
	Residence	SSW	.90	2.7E-06	2.7E-06	2.4E-06	9.9E-09
	Residence	SW	1.00	1.7E-06	1.7E-06	1.5E-06	8.9E-09
	Residence	WSW	1.13	9.0E-07	8.9E-07	7.8E-07	5.9E-09
	Residence	W	.98	1.4E-06	1.4E-06	1.2E-06	9.5E-09
	Residence	NW	.69	4.6E-06	4.6E-06	4.2E-06	2.5E-08
	Residence	NW	1.07	1.6E-06	1.6E-06	1.4E-06	8.7E-09
	Residence	NNW	1.19	1.4E-06	1.4E-06	1.2E-06	5.8E-09
	Residence	NNE	1.32	2.5E-06	2.5E-06	2.1E-06	9.9E-09
	Residence	NNE	1.31	2.5E-06	2.5E-06	2.2E-06	1.0E-08
	Residence	NE	1.36	2.6E-06	2.6E-06	2.2E-06	9.4E-09
	Garden	S	1.28	1.5E-06	1.5E-06	1.3E-06	4.7E-09
	Garden	WSW	2.14	2.0E-07	2.0E-07	1.7E-07	1.2E-09
	Garden	W	1.50	4.9E-07	4.9E-07	4.2E-07	3.2E-09
	Garden	NW	.69	4.6E-06	4.6E-06	4.1E-06	2.5E-08
	Garden	NNW	1.09	1.7E-06	1.7E-06	1.5E-06	7.3E-09
	Garden	NNW	1.46	8.4E-07	8.3E-07	7.1E-07	3.5E-09
	Garden	N	2.31	4.4E-07	4.3E-07	3.5E-07	1.3E-09
	Garden	NNE	2.16	8.2E-07	8.1E-07	6.7E-07	3.0E-09
	Garden	NE	2.24	8.4E-07	8.3E-07	6.8E-07	2.8E-09
	Sheep	NNW	4.46	8.5E-08	8.3E-08	6.4E-08	2.6E-10
	Sheep	NNE	4.50	1.9E-07	1.9E-07	1.4E-07	5.6E-10
	Goat	WNW	2.30	2.6E-07	2.6E-07	2.2E-07	1.4E-09

Goat	NNW	3.08	1.7E-07	1.7E-07	1.3E-07	5.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.382E-07	2.844E-07	1.768E-07	9.884E-08	6.658E-08	4.903E-08	3.816E-08	3.086E-08	2.568E-08	2.185E-08
SSW	8.151E-07	3.275E-07	2.251E-07	1.505E-07	9.004E-08	6.174E-08	4.547E-08	3.517E-08	2.821E-08	2.328E-08	1.964E-08
SW	1.150E-06	4.523E-07	3.164E-07	2.102E-07	1.178E-07	7.642E-08	5.404E-08	4.055E-08	3.177E-08	2.573E-08	2.137E-08
WSW	1.211E-06	4.644E-07	3.042E-07	1.915E-07	1.008E-07	6.333E-08	4.395E-08	3.258E-08	2.531E-08	2.037E-08	1.704E-08
W	1.611E-06	5.708E-07	3.582E-07	2.179E-07	1.104E-07	6.829E-08	4.710E-08	3.483E-08	2.704E-08	2.177E-08	1.802E-08
WNW	1.858E-06	6.257E-07	3.782E-07	2.329E-07	1.219E-07	7.696E-08	5.378E-08	4.016E-08	3.143E-08	2.547E-08	2.120E-08
NW	1.820E-06	6.145E-07	3.538E-07	2.100E-07	1.090E-07	6.904E-08	4.851E-08	3.643E-08	2.866E-08	2.334E-08	1.962E-08
NNW	1.706E-06	5.681E-07	3.227E-07	1.889E-07	9.915E-08	6.416E-08	4.598E-08	3.511E-08	2.801E-08	2.307E-08	1.973E-08
N	1.751E-06	6.179E-07	3.761E-07	2.313E-07	1.278E-07	8.509E-08	6.201E-08	4.785E-08	3.843E-08	3.180E-08	2.711E-08
NNE	3.590E-06	1.280E-06	7.693E-07	4.495E-07	2.328E-07	1.499E-07	1.071E-07	8.168E-08	6.684E-08	5.634E-08	4.769E-08
NE	2.374E-06	9.402E-07	6.270E-07	3.986E-07	2.256E-07	1.507E-07	1.096E-07	8.423E-08	6.739E-08	5.555E-08	4.688E-08
ENE	1.358E-06	5.324E-07	3.603E-07	2.487E-07	1.630E-07	1.185E-07	9.085E-08	7.241E-08	5.948E-08	5.004E-08	4.292E-08
E	1.061E-06	4.341E-07	2.860E-07	1.909E-07	1.219E-07	8.829E-08	6.794E-08	5.446E-08	4.501E-08	3.809E-08	3.285E-08
ESE	1.198E-06	4.623E-07	2.929E-07	1.918E-07	1.215E-07	8.832E-08	6.843E-08	5.527E-08	4.601E-08	3.921E-08	3.403E-08
SE	1.041E-06	3.935E-07	2.490E-07	1.666E-07	1.086E-07	7.944E-08	6.137E-08	4.927E-08	4.074E-08	3.447E-08	2.972E-08
SSE	1.131E-06	4.349E-07	2.828E-07	1.840E-07	1.110E-07	7.726E-08	5.778E-08	4.534E-08	3.685E-08	3.077E-08	2.625E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.893E-08	1.162E-08	8.383E-09	5.506E-09	4.086E-09	3.244E-09	2.690E-09	2.297E-09	2.003E-09	1.774E-09	1.589E-09
SSW	1.688E-08	9.925E-09	6.920E-09	4.318E-09	3.080E-09	2.368E-09	1.911E-09	1.594E-09	1.363E-09	1.188E-09	1.050E-09
SW	1.813E-08	1.012E-08	6.827E-09	4.078E-09	2.823E-09	2.121E-09	1.679E-09	1.378E-09	1.162E-09	9.993E-10	8.736E-10
WSW	1.456E-08	8.083E-09	5.453E-09	3.268E-09	2.271E-09	1.711E-09	1.357E-09	1.114E-09	9.383E-10	8.054E-10	7.015E-10
W	1.525E-08	8.841E-09	6.167E-09	3.874E-09	2.754E-09	2.073E-09	1.625E-09	1.322E-09	1.106E-09	9.460E-10	8.228E-10
WNW	1.803E-08	1.092E-08	7.906E-09	5.267E-09	3.845E-09	2.897E-09	2.281E-09	1.865E-09	1.567E-09	1.345E-09	1.174E-09
NW	1.685E-08	1.020E-08	7.395E-09	4.977E-09	3.757E-09	2.976E-09	2.408E-09	1.984E-09	1.676E-09	1.444E-09	1.264E-09
NNW	1.720E-08	1.103E-08	8.292E-09	5.771E-09	4.349E-09	3.360E-09	2.666E-09	2.186E-09	1.842E-09	1.585E-09	1.385E-09
N	2.354E-08	1.489E-08	1.100E-08	7.457E-09	5.597E-09	4.399E-09	3.534E-09	2.895E-09	2.433E-09	2.087E-09	1.820E-09
NNE	4.117E-08	2.404E-08	1.678E-08	1.053E-08	7.545E-09	5.821E-09	4.707E-09	3.934E-09	3.368E-09	2.938E-09	2.600E-09
NE	4.033E-08	2.375E-08	1.663E-08	1.047E-08	7.522E-09	5.817E-09	4.716E-09	3.951E-09	3.392E-09	2.966E-09	2.632E-09
ENE	3.742E-08	2.309E-08	1.664E-08	1.086E-08	8.000E-09	6.308E-09	5.200E-09	4.420E-09	3.844E-09	3.402E-09	3.052E-09
E	2.879E-08	1.789E-08	1.293E-08	8.455E-09	6.210E-09	4.869E-09	3.984E-09	3.359E-09	2.896E-09	2.539E-09	2.257E-09
ESE	3.001E-08	1.924E-08	1.426E-08	9.683E-09	7.321E-09	5.880E-09	4.912E-09	4.219E-09	3.698E-09	3.293E-09	2.970E-09
SE	2.604E-08	1.630E-08	1.186E-08	7.845E-09	5.827E-09	4.622E-09	3.827E-09	3.264E-09	2.847E-09	2.525E-09	2.270E-09
SSE	2.279E-08	1.437E-08	1.062E-08	7.307E-09	5.661E-09	4.666E-09	3.987E-09	3.480E-09	3.074E-09	2.733E-09	2.438E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6

DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.707E-07	1.018E-07	4.936E-08	3.097E-08	2.190E-08	1.181E-08	5.514E-09	3.247E-09	2.298E-09	1.773E-09
SSW	2.147E-07	9.090E-08	4.569E-08	2.832E-08	1.970E-08	1.014E-08	4.346E-09	2.375E-09	1.597E-09	1.189E-09
SW	2.994E-07	1.200E-07	5.461E-08	3.198E-08	2.146E-08	1.044E-08	4.131E-09	2.131E-09	1.381E-09	1.001E-09
WSW	2.897E-07	1.043E-07	4.457E-08	2.550E-08	1.711E-08	8.353E-09	3.311E-09	1.719E-09	1.117E-09	8.063E-10
W	3.431E-07	1.156E-07	4.784E-08	2.726E-08	1.810E-08	9.076E-09	3.886E-09	2.075E-09	1.326E-09	9.479E-10
WNW	3.686E-07	1.266E-07	5.451E-08	3.165E-08	2.129E-08	1.116E-08	5.221E-09	2.904E-09	1.871E-09	1.348E-09
NW	3.478E-07	1.137E-07	4.915E-08	2.886E-08	1.969E-08	1.043E-08	4.972E-09	2.957E-09	1.988E-09	1.446E-09
NNW	3.178E-07	1.035E-07	4.648E-08	2.816E-08	1.978E-08	1.119E-08	5.699E-09	3.346E-09	2.192E-09	1.587E-09
N	3.655E-07	1.318E-07	6.250E-08	3.859E-08	2.718E-08	1.508E-08	7.417E-09	4.373E-09	2.902E-09	2.091E-09
NNE	7.406E-07	2.441E-07	1.083E-07	6.708E-08	4.784E-08	2.462E-08	1.059E-08	5.835E-09	3.939E-09	2.940E-09
NE	5.951E-07	2.307E-07	1.104E-07	6.769E-08	4.702E-08	2.427E-08	1.053E-08	5.831E-09	3.957E-09	2.969E-09
ENE	3.489E-07	1.623E-07	9.085E-08	5.958E-08	4.299E-08	2.340E-08	1.087E-08	6.316E-09	4.423E-09	3.403E-09
E	2.766E-07	1.223E-07	6.797E-08	4.507E-08	3.290E-08	1.811E-08	8.453E-09	4.873E-09	3.361E-09	2.540E-09
ESE	2.856E-07	1.224E-07	6.847E-08	4.606E-08	3.408E-08	1.942E-08	9.650E-09	5.877E-09	4.219E-09	3.293E-09
SE	2.445E-07	1.085E-07	6.135E-08	4.079E-08	2.976E-08	1.649E-08	7.840E-09	4.626E-09	3.266E-09	2.526E-09
SSE	2.727E-07	1.122E-07	5.800E-08	3.696E-08	2.631E-08	1.457E-08	7.311E-09	4.660E-09	3.470E-09	2.725E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.036E+01	8.038E+01	8.038E+01	8.038E+01	8.038E+01	7.732E+01	6.927E+01	5.972E+01	4.991E+01	4.002E+01
SSW	8.001E+01	7.962E+01	7.962E+01	7.962E+01	7.962E+01	7.724E+01	7.098E+01	6.355E+01	5.592E+01	4.822E+01
SW	7.822E+01	7.753E+01	7.753E+01	7.753E+01	7.753E+01	7.529E+01	6.938E+01	6.237E+01	5.518E+01	4.792E+01
WSW	7.486E+01	7.396E+01	7.396E+01	7.396E+01	7.236E+01	6.690E+01	5.618E+01	4.345E+01	3.039E+01	1.736E+01
W	6.955E+01	6.828E+01	6.828E+01	6.828E+01	6.828E+01	5.855E+01	3.289E+01	8.608E+00	1.732E+00	1.215E+00
WNW	7.213E+01	7.063E+01	7.063E+01	7.063E+01	7.063E+01	5.936E+01	2.968E+01	5.985E+00	1.163E+00	7.944E-01
NW	7.673E+01	7.559E+01	7.559E+01	7.559E+01	7.505E+01	6.692E+01	4.669E+01	2.292E+01	7.056E+00	3.422E+00
NNW	7.613E+01	7.527E+01	7.527E+01	7.527E+01	7.420E+01	6.296E+01	3.577E+01	9.883E+00	2.262E+00	1.598E+00
N	7.721E+01	7.658E+01	7.658E+01	7.658E+01	7.604E+01	6.716E+01	4.497E+01	1.940E+01	4.926E+00	2.492E+00
NNE	7.694E+01	7.706E+01	7.706E+01	7.488E+01	7.253E+01	7.091E+01	6.787E+01	6.427E+01	6.056E+01	5.683E+01
NE	7.865E+01	7.873E+01	7.873E+01	7.873E+01	7.873E+01	7.724E+01	7.331E+01	6.864E+01	6.384E+01	5.901E+01
ENE	8.373E+01	8.378E+01	8.378E+01	8.378E+01	8.378E+01	8.229E+01	7.835E+01	7.368E+01	6.889E+01	6.405E+01
E	8.632E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01
ESE	8.399E+01	8.402E+01	8.402E+01	8.402E+01	8.402E+01	8.355E+01	8.229E+01	8.081E+01	7.928E+01	7.774E+01
SE	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.324E+01	8.074E+01	7.776E+01	7.471E+01	7.163E+01
SSE	8.240E+01	8.240E+01	8.240E+01	8.240E+01	8.240E+01	7.778E+01	6.561E+01	5.117E+01	3.634E+01	2.144E+01

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.379E-07	2.840E-07	1.765E-07	9.860E-08	6.635E-08	4.881E-08	3.795E-08	3.065E-08	2.548E-08	2.165E-08
SSW	8.148E-07	3.272E-07	2.248E-07	1.503E-07	8.982E-08	6.153E-08	4.527E-08	3.498E-08	2.803E-08	2.311E-08	1.948E-08
SW	1.150E-06	4.518E-07	3.159E-07	2.099E-07	1.175E-07	7.616E-08	5.381E-08	4.034E-08	3.157E-08	2.554E-08	2.119E-08
WSW	1.210E-06	4.640E-07	3.038E-07	1.912E-07	1.006E-07	6.314E-08	4.377E-08	3.241E-08	2.516E-08	2.022E-08	1.690E-08
W	1.610E-06	5.704E-07	3.578E-07	2.176E-07	1.101E-07	6.809E-08	4.691E-08	3.466E-08	2.688E-08	2.162E-08	1.787E-08
WNW	1.857E-06	6.252E-07	3.778E-07	2.325E-07	1.216E-07	7.672E-08	5.357E-08	3.997E-08	3.126E-08	2.531E-08	2.104E-08
NW	1.819E-06	6.139E-07	3.533E-07	2.096E-07	1.087E-07	6.878E-08	4.828E-08	3.622E-08	2.847E-08	2.316E-08	1.944E-08
NNW	1.705E-06	5.676E-07	3.222E-07	1.885E-07	9.889E-08	6.393E-08	4.577E-08	3.492E-08	2.783E-08	2.290E-08	1.956E-08
N	1.750E-06	6.173E-07	3.755E-07	2.308E-07	1.275E-07	8.476E-08	6.170E-08	4.755E-08	3.814E-08	3.152E-08	2.684E-08
NNE	3.589E-06	1.279E-06	7.684E-07	4.488E-07	2.323E-07	1.494E-07	1.067E-07	8.125E-08	6.642E-08	5.593E-08	4.729E-08
NE	2.373E-06	9.395E-07	6.263E-07	3.980E-07	2.250E-07	1.502E-07	1.091E-07	8.379E-08	6.697E-08	5.515E-08	4.649E-08
ENE	1.357E-06	5.319E-07	3.599E-07	2.482E-07	1.625E-07	1.180E-07	9.038E-08	7.195E-08	5.903E-08	4.959E-08	4.248E-08
E	1.061E-06	4.337E-07	2.855E-07	1.906E-07	1.215E-07	8.791E-08	6.756E-08	5.408E-08	4.463E-08	3.771E-08	3.248E-08
ESE	1.197E-06	4.619E-07	2.925E-07	1.915E-07	1.211E-07	8.797E-08	6.807E-08	5.490E-08	4.565E-08	3.884E-08	3.367E-08
SE	1.040E-06	3.931E-07	2.487E-07	1.663E-07	1.083E-07	7.912E-08	6.105E-08	4.895E-08	4.042E-08	3.416E-08	2.941E-08
SSE	1.130E-06	4.345E-07	2.825E-07	1.837E-07	1.107E-07	7.698E-08	5.751E-08	4.507E-08	3.659E-08	3.052E-08	2.600E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.874E-08	1.144E-08	8.203E-09	5.324E-09	3.904E-09	3.064E-09	2.511E-09	2.119E-09	1.827E-09	1.599E-09	1.416E-09
SSW	1.672E-08	9.781E-09	6.784E-09	4.188E-09	2.955E-09	2.247E-09	1.793E-09	1.480E-09	1.252E-09	1.078E-09	9.428E-10
SW	1.796E-08	9.967E-09	6.686E-09	3.947E-09	2.700E-09	2.004E-09	1.567E-09	1.271E-09	1.059E-09	9.000E-10	7.775E-10
WSW	1.442E-08	7.964E-09	5.342E-09	3.164E-09	2.173E-09	1.617E-09	1.267E-09	1.028E-09	8.554E-10	7.257E-10	6.249E-10
W	1.511E-08	8.716E-09	6.047E-09	3.759E-09	2.644E-09	1.969E-09	1.527E-09	1.230E-09	1.019E-09	8.631E-10	7.435E-10
WNW	1.789E-08	1.078E-08	7.767E-09	5.121E-09	3.699E-09	2.758E-09	2.150E-09	1.740E-09	1.448E-09	1.231E-09	1.064E-09
NW	1.668E-08	1.004E-08	7.238E-09	4.814E-09	3.589E-09	2.809E-09	2.244E-09	1.827E-09	1.524E-09	1.298E-09	1.124E-09
NNW	1.703E-08	1.087E-08	8.116E-09	5.577E-09	4.146E-09	3.157E-09	2.471E-09	2.002E-09	1.666E-09	1.416E-09	1.224E-09
N	2.328E-08	1.462E-08	1.072E-08	7.169E-09	5.304E-09	4.110E-09	3.255E-09	2.630E-09	2.180E-09	1.846E-09	1.589E-09
NNE	4.078E-08	2.368E-08	1.644E-08	1.020E-08	7.226E-09	5.510E-09	4.406E-09	3.641E-09	3.083E-09	2.659E-09	2.328E-09
NE	3.995E-08	2.340E-08	1.629E-08	1.013E-08	7.193E-09	5.494E-09	4.399E-09	3.640E-09	3.086E-09	2.665E-09	2.335E-09
ENE	3.699E-08	2.267E-08	1.622E-08	1.044E-08	7.581E-09	5.892E-09	4.786E-09	4.009E-09	3.436E-09	2.997E-09	2.650E-09
E	2.843E-08	1.753E-08	1.258E-08	8.097E-09	5.855E-09	4.520E-09	3.641E-09	3.022E-09	2.565E-09	2.215E-09	1.939E-09
ESE	2.965E-08	1.887E-08	1.389E-08	9.299E-09	6.930E-09	5.486E-09	4.517E-09	3.824E-09	3.304E-09	2.901E-09	2.578E-09
SE	2.573E-08	1.600E-08	1.156E-08	7.541E-09	5.523E-09	4.320E-09	3.526E-09	2.965E-09	2.549E-09	2.229E-09	1.976E-09
SSE	2.255E-08	1.413E-08	1.037E-08	7.039E-09	5.378E-09	4.372E-09	3.684E-09	3.171E-09	2.763E-09	2.424E-09	2.133E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
S	2.704E-07	1.016E-07	4.914E-08	3.077E-08	2.171E-08	1.162E-08	5.333E-09	3.067E-09	2.120E-09	1.599E-09
SSW	2.144E-07	9.068E-08	4.549E-08	2.814E-08	1.953E-08	9.992E-09	4.217E-09	2.255E-09	1.483E-09	1.080E-09
SW	2.990E-07	1.197E-07	5.438E-08	3.178E-08	2.128E-08	1.028E-08	4.001E-09	2.015E-09	1.275E-09	9.016E-10
WSW	2.894E-07	1.041E-07	4.439E-08	2.535E-08	1.697E-08	8.234E-09	3.207E-09	1.625E-09	1.030E-09	7.268E-10
W	3.428E-07	1.153E-07	4.766E-08	2.710E-08	1.796E-08	8.952E-09	3.772E-09	1.972E-09	1.235E-09	8.651E-10
WNW	3.682E-07	1.263E-07	5.431E-08	3.148E-08	2.114E-08	1.102E-08	5.077E-09	2.766E-09	1.746E-09	1.234E-09
NW	3.473E-07	1.134E-07	4.893E-08	2.866E-08	1.952E-08	1.027E-08	4.808E-09	2.791E-09	1.831E-09	1.301E-09
NNW	3.173E-07	1.033E-07	4.627E-08	2.798E-08	1.961E-08	1.101E-08	5.505E-09	3.146E-09	2.008E-09	1.419E-09
N	3.650E-07	1.315E-07	6.219E-08	3.831E-08	2.691E-08	1.481E-08	7.130E-09	4.086E-09	2.637E-09	1.850E-09
NNE	7.397E-07	2.435E-07	1.079E-07	6.666E-08	4.744E-08	2.426E-08	1.026E-08	5.526E-09	3.647E-09	2.662E-09
NE	5.944E-07	2.302E-07	1.099E-07	6.727E-08	4.663E-08	2.392E-08	1.020E-08	5.509E-09	3.646E-09	2.668E-09
ENE	3.485E-07	1.618E-07	9.038E-08	5.913E-08	4.256E-08	2.298E-08	1.045E-08	5.900E-09	4.013E-09	2.998E-09
E	2.763E-07	1.219E-07	6.759E-08	4.469E-08	3.253E-08	1.775E-08	8.096E-09	4.524E-09	3.025E-09	2.216E-09
ESE	2.852E-07	1.220E-07	6.811E-08	4.570E-08	3.372E-08	1.905E-08	9.266E-09	5.483E-09	3.824E-09	2.901E-09
SE	2.442E-07	1.082E-07	6.103E-08	4.047E-08	2.946E-08	1.619E-08	7.538E-09	4.323E-09	2.967E-09	2.230E-09
SSE	2.724E-07	1.119E-07	5.773E-08	3.670E-08	2.606E-08	1.433E-08	7.041E-09	4.365E-09	3.163E-09	2.417E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.074E-06	4.091E-07	2.636E-07	1.641E-07	9.204E-08	6.201E-08	4.561E-08	3.542E-08	2.858E-08	2.373E-08	2.014E-08
SSW	7.794E-07	3.066E-07	2.101E-07	1.413E-07	8.495E-08	5.823E-08	4.278E-08	3.298E-08	2.637E-08	2.169E-08	1.824E-08
SW	1.102E-06	4.235E-07	2.957E-07	1.975E-07	1.106E-07	7.142E-08	5.022E-08	3.747E-08	2.919E-08	2.351E-08	1.943E-08
WSW	1.161E-06	4.354E-07	2.837E-07	1.789E-07	9.393E-08	5.867E-08	4.046E-08	2.980E-08	2.301E-08	1.841E-08	1.534E-08
W	1.542E-06	5.323E-07	3.314E-07	2.015E-07	1.016E-07	6.250E-08	4.283E-08	3.148E-08	2.431E-08	1.946E-08	1.602E-08
WNW	1.788E-06	5.871E-07	3.514E-07	2.164E-07	1.130E-07	7.097E-08	4.933E-08	3.665E-08	2.854E-08	2.301E-08	1.907E-08
NW	1.756E-06	5.797E-07	3.296E-07	1.950E-07	1.009E-07	6.357E-08	4.444E-08	3.321E-08	2.601E-08	2.108E-08	1.765E-08
NNW	1.640E-06	5.327E-07	2.981E-07	1.742E-07	9.145E-08	5.909E-08	4.226E-08	3.219E-08	2.561E-08	2.104E-08	1.797E-08
N	1.678E-06	5.768E-07	3.469E-07	2.137E-07	1.186E-07	7.905E-08	5.757E-08	4.436E-08	3.557E-08	2.937E-08	2.501E-08
NNE	3.426E-06	1.188E-06	7.048E-07	4.110E-07	2.130E-07	1.370E-07	9.783E-08	7.443E-08	6.091E-08	5.134E-08	4.338E-08
NE	2.268E-06	8.786E-07	5.833E-07	3.719E-07	2.111E-07	1.408E-07	1.021E-07	7.830E-08	6.246E-08	5.134E-08	4.320E-08
ENE	1.308E-06	5.028E-07	3.390E-07	2.354E-07	1.554E-07	1.130E-07	8.652E-08	6.882E-08	5.639E-08	4.733E-08	4.050E-08
E	1.026E-06	4.133E-07	2.704E-07	1.811E-07	1.162E-07	8.420E-08	6.471E-08	5.177E-08	4.269E-08	3.604E-08	3.101E-08
ESE	1.160E-06	4.399E-07	2.764E-07	1.815E-07	1.156E-07	8.416E-08	6.518E-08	5.258E-08	4.371E-08	3.719E-08	3.223E-08
SE	1.009E-06	3.745E-07	2.351E-07	1.580E-07	1.036E-07	7.589E-08	5.857E-08	4.694E-08	3.874E-08	3.271E-08	2.814E-08
SSE	1.087E-06	4.098E-07	2.648E-07	1.729E-07	1.048E-07	7.293E-08	5.444E-08	4.261E-08	3.454E-08	2.876E-08	2.446E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.741E-08	1.060E-08	7.594E-09	4.936E-09	3.634E-09	2.868E-09	2.364E-09	1.995E-09	1.699E-09	1.464E-09	1.275E-09
SSW	1.563E-08	9.073E-09	6.262E-09	3.845E-09	2.709E-09	2.061E-09	1.648E-09	1.362E-09	1.148E-09	9.813E-10	8.470E-10
SW	1.640E-08	8.970E-09	5.952E-09	3.461E-09	2.344E-09	1.729E-09	1.346E-09	1.086E-09	8.965E-10	7.530E-10	6.417E-10

WSW	1.305E-08	7.096E-09	4.705E-09	2.742E-09	1.852E-09	1.345E-09	1.025E-09	8.099E-10	6.576E-10	5.461E-10	4.616E-10
W	1.350E-08	7.715E-09	5.314E-09	3.204E-09	2.145E-09	1.543E-09	1.163E-09	9.132E-10	7.399E-10	6.138E-10	5.188E-10
WNW	1.615E-08	9.683E-09	6.950E-09	4.420E-09	3.040E-09	2.196E-09	1.665E-09	1.316E-09	1.071E-09	8.930E-10	7.580E-10
NW	1.511E-08	9.051E-09	6.505E-09	4.248E-09	3.022E-09	2.268E-09	1.763E-09	1.402E-09	1.145E-09	9.572E-10	8.142E-10
NNW	1.564E-08	1.001E-08	7.488E-09	5.010E-09	3.532E-09	2.606E-09	1.991E-09	1.577E-09	1.287E-09	1.074E-09	9.133E-10
N	2.168E-08	1.367E-08	1.005E-08	6.681E-09	4.726E-09	3.514E-09	2.711E-09	2.146E-09	1.747E-09	1.456E-09	1.235E-09
NNE	3.738E-08	2.163E-08	1.497E-08	9.258E-09	6.555E-09	5.003E-09	4.008E-09	3.317E-09	2.803E-09	2.415E-09	2.107E-09
NE	3.706E-08	2.159E-08	1.499E-08	9.305E-09	6.609E-09	5.062E-09	4.069E-09	3.381E-09	2.868E-09	2.481E-09	2.175E-09
ENE	3.523E-08	2.154E-08	1.541E-08	9.949E-09	7.261E-09	5.681E-09	4.651E-09	3.927E-09	3.378E-09	2.961E-09	2.626E-09
E	2.713E-08	1.670E-08	1.198E-08	7.732E-09	5.617E-09	4.361E-09	3.537E-09	2.956E-09	2.521E-09	2.190E-09	1.926E-09
ESE	2.838E-08	1.808E-08	1.333E-08	8.974E-09	6.734E-09	5.373E-09	4.461E-09	3.808E-09	3.303E-09	2.914E-09	2.599E-09
SE	2.461E-08	1.527E-08	1.104E-08	7.223E-09	5.317E-09	4.185E-09	3.441E-09	2.915E-09	2.514E-09	2.209E-09	1.964E-09
SSE	2.119E-08	1.325E-08	9.737E-09	6.651E-09	5.127E-09	4.193E-09	3.487E-09	2.933E-09	2.502E-09	2.153E-09	1.870E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.517E-07	9.471E-08	4.591E-08	2.869E-08	2.019E-08	1.078E-08	4.948E-09	2.871E-09	1.987E-09	1.463E-09
SSW	2.009E-07	8.559E-08	4.298E-08	2.648E-08	1.829E-08	9.280E-09	3.877E-09	2.069E-09	1.362E-09	9.810E-10
SW	2.804E-07	1.125E-07	5.077E-08	2.939E-08	1.952E-08	9.279E-09	3.518E-09	1.740E-09	1.088E-09	7.543E-10
WSW	2.708E-07	9.714E-08	4.105E-08	2.320E-08	1.540E-08	7.356E-09	2.783E-09	1.352E-09	8.134E-10	5.478E-10
W	3.183E-07	1.064E-07	4.354E-08	2.451E-08	1.611E-08	7.933E-09	3.202E-09	1.551E-09	9.184E-10	6.160E-10
WNW	3.438E-07	1.173E-07	5.003E-08	2.875E-08	1.916E-08	9.906E-09	4.369E-09	2.209E-09	1.322E-09	8.958E-10
NW	3.254E-07	1.052E-07	4.505E-08	2.619E-08	1.773E-08	9.265E-09	4.205E-09	2.267E-09	1.407E-09	9.600E-10
NNW	2.952E-07	9.547E-08	4.272E-08	2.575E-08	1.802E-08	1.014E-08	4.904E-09	2.607E-09	1.585E-09	1.078E-09
N	3.388E-07	1.222E-07	5.801E-08	3.572E-08	2.507E-08	1.384E-08	6.561E-09	3.516E-09	2.156E-09	1.460E-09
NNE	6.816E-07	2.232E-07	9.893E-08	6.113E-08	4.352E-08	2.217E-08	9.326E-09	5.019E-09	3.319E-09	2.416E-09
NE	5.550E-07	2.156E-07	1.029E-07	6.275E-08	4.334E-08	2.210E-08	9.370E-09	5.077E-09	3.382E-09	2.482E-09
ENE	3.294E-07	1.543E-07	8.651E-08	5.649E-08	4.057E-08	2.186E-08	9.968E-09	5.690E-09	3.924E-09	2.960E-09
E	2.625E-07	1.164E-07	6.473E-08	4.275E-08	3.106E-08	1.692E-08	7.736E-09	4.366E-09	2.957E-09	2.191E-09
ESE	2.706E-07	1.163E-07	6.520E-08	4.376E-08	3.228E-08	1.826E-08	8.946E-09	5.371E-09	3.802E-09	2.912E-09
SE	2.318E-07	1.034E-07	5.854E-08	3.879E-08	2.819E-08	1.547E-08	7.224E-09	4.190E-09	2.913E-09	2.209E-09
SSE	2.562E-07	1.058E-07	5.464E-08	3.464E-08	2.452E-08	1.345E-08	6.660E-09	4.160E-09	2.927E-09	2.151E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.787E-08	9.225E-09	5.746E-09	3.117E-09	1.271E-09	6.818E-10	4.230E-10	2.880E-10	2.087E-10	1.582E-10	1.240E-10
SSW	1.393E-08	7.387E-09	4.722E-09	2.618E-09	1.089E-09	5.924E-10	3.711E-10	2.542E-10	1.849E-10	1.405E-10	1.103E-10
SW	1.964E-08	1.080E-08	7.021E-09	3.896E-09	1.623E-09	8.739E-10	5.427E-10	3.696E-10	2.679E-10	2.030E-10	1.592E-10
WSW	2.364E-08	1.231E-08	7.566E-09	4.042E-09	1.629E-09	8.609E-10	5.284E-10	3.572E-10	2.576E-10	1.947E-10	1.525E-10
W	3.098E-08	1.498E-08	8.799E-09	4.683E-09	1.849E-09	9.621E-10	5.842E-10	3.919E-10	2.812E-10	2.117E-10	1.654E-10
WNW	3.293E-08	1.672E-08	9.777E-09	5.230E-09	2.037E-09	1.059E-09	6.436E-10	4.323E-10	3.106E-10	2.343E-10	1.833E-10
NW	3.046E-08	1.598E-08	9.347E-09	4.979E-09	1.912E-09	9.908E-10	6.017E-10	4.041E-10	2.904E-10	2.192E-10	1.716E-10
NNW	2.560E-08	1.298E-08	7.482E-09	3.797E-09	1.431E-09	7.439E-10	4.535E-10	3.056E-10	2.203E-10	1.667E-10	1.307E-10
N	2.409E-08	1.210E-08	7.197E-09	3.737E-09	1.441E-09	7.557E-10	4.630E-10	3.129E-10	2.258E-10	1.709E-10	1.340E-10
NNE	5.377E-08	2.552E-08	1.482E-08	7.640E-09	2.974E-09	1.553E-09	9.467E-10	6.371E-10	4.583E-10	3.458E-10	2.704E-10
NE	4.735E-08	2.442E-08	1.519E-08	8.230E-09	3.373E-09	1.800E-09	1.112E-09	7.543E-10	5.453E-10	4.126E-10	3.231E-10
ENE	2.780E-08	1.523E-08	9.593E-09	5.275E-09	2.177E-09	1.186E-09	7.448E-10	5.113E-10	3.726E-10	2.834E-10	2.227E-10
E	2.355E-08	1.315E-08	8.209E-09	4.450E-09	1.795E-09	9.714E-10	6.079E-10	4.167E-10	3.036E-10	2.310E-10	1.817E-10
ESE	2.561E-08	1.419E-08	8.748E-09	4.679E-09	1.858E-09	9.967E-10	6.202E-10	4.237E-10	3.080E-10	2.341E-10	1.841E-10
SE	2.179E-08	1.208E-08	7.441E-09	3.994E-09	1.593E-09	8.591E-10	5.366E-10	3.675E-10	2.676E-10	2.036E-10	1.601E-10
SSE	2.134E-08	1.151E-08	7.121E-09	3.854E-09	1.562E-09	8.443E-10	5.275E-10	3.611E-10	2.627E-10	1.997E-10	1.569E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.983E-11	4.609E-11	2.784E-11	1.455E-11	9.251E-12	6.712E-12	6.386E-12	7.975E-12	7.180E-12	6.172E-12	5.025E-12
SSW	8.879E-11	4.112E-11	2.486E-11	1.298E-11	8.222E-12	5.903E-12	4.814E-12	4.275E-12	4.384E-12	4.705E-12	3.992E-12
SW	1.281E-10	5.895E-11	3.579E-11	1.828E-11	1.153E-11	8.209E-12	6.467E-12	5.765E-12	5.760E-12	4.971E-12	4.160E-12
WSW	1.249E-10	5.693E-11	3.408E-11	1.919E-11	1.434E-11	1.209E-11	9.094E-12	6.965E-12	5.401E-12	4.384E-12	3.593E-12
W	1.329E-10	6.063E-11	4.049E-11	3.015E-11	1.944E-11	1.339E-11	9.759E-12	7.364E-12	5.728E-12	4.577E-12	3.737E-12
WNW	1.475E-10	6.847E-11	5.289E-11	3.789E-11	2.357E-11	1.625E-11	1.176E-11	8.835E-12	6.872E-12	5.496E-12	4.487E-12
NW	1.382E-10	6.369E-11	4.251E-11	3.621E-11	2.435E-11	1.598E-11	1.125E-11	8.486E-12	6.588E-12	5.266E-12	4.300E-12
NNW	1.079E-10	4.972E-11	3.510E-11	3.585E-11	2.210E-11	1.425E-11	1.024E-11	7.738E-12	6.021E-12	4.813E-12	3.926E-12
N	1.080E-10	5.087E-11	3.168E-11	4.047E-11	2.870E-11	1.750E-11	1.220E-11	9.193E-12	7.159E-12	5.723E-12	4.674E-12
NNE	2.175E-10	1.000E-10	6.065E-11	3.193E-11	2.045E-11	1.475E-11	1.146E-11	9.780E-12	8.213E-12	8.668E-12	7.393E-12
NE	2.600E-10	1.193E-10	7.167E-11	3.706E-11	2.353E-11	1.672E-11	1.279E-11	1.024E-11	8.629E-12	7.311E-12	6.637E-12
ENE	1.796E-10	8.362E-11	5.082E-11	2.672E-11	1.715E-11	1.235E-11	9.565E-12	7.756E-12	6.536E-12	5.603E-12	4.987E-12
E	1.466E-10	6.865E-11	4.195E-11	2.226E-11	1.428E-11	1.045E-11	8.117E-12	6.557E-12	5.463E-12	4.634E-12	4.008E-12
ESE	1.486E-10	6.960E-11	4.259E-11	2.268E-11	1.461E-11	1.079E-11	8.478E-12	7.001E-12	5.945E-12	5.134E-12	4.500E-12
SE	1.293E-10	6.064E-11	3.715E-11	1.981E-11	1.277E-11	9.415E-12	7.310E-12	5.972E-12	5.055E-12	4.351E-12	3.823E-12
SSE	1.265E-10	5.898E-11	3.645E-11	1.906E-11	1.267E-11	1.530E-11	1.482E-11	1.163E-11	9.017E-12	6.784E-12	5.275E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Reactor Bldg/Fuel Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.350E-09	1.419E-09	4.380E-10	2.121E-10	1.252E-10	4.992E-11	1.515E-11	7.259E-12	7.218E-12	6.046E-12
SSW	4.379E-09	1.208E-09	3.833E-10	1.878E-10	1.113E-10	4.449E-11	1.351E-11	6.086E-12	4.470E-12	4.346E-12
SW	6.472E-09	1.795E-09	5.618E-10	2.723E-10	1.607E-10	6.403E-11	1.917E-11	8.397E-12	5.964E-12	4.904E-12
WSW	7.053E-09	1.824E-09	5.486E-10	2.621E-10	1.548E-10	6.188E-11	2.034E-11	1.149E-11	6.977E-12	4.392E-12
W	8.344E-09	2.085E-09	6.081E-10	2.863E-10	1.671E-10	6.774E-11	2.769E-11	1.355E-11	7.425E-12	4.607E-12
WNW	9.300E-09	2.312E-09	6.698E-10	3.163E-10	1.851E-10	7.911E-11	3.486E-11	1.641E-11	8.924E-12	5.530E-12
NW	8.880E-09	2.184E-09	6.264E-10	2.957E-10	1.733E-10	7.084E-11	3.234E-11	1.632E-11	8.554E-12	5.300E-12
NNW	7.066E-09	1.652E-09	4.718E-10	2.242E-10	1.329E-10	5.614E-11	2.957E-11	1.474E-11	7.800E-12	4.843E-12
N	6.749E-09	1.647E-09	4.810E-10	2.297E-10	1.353E-10	5.504E-11	3.329E-11	1.837E-11	9.276E-12	5.760E-12
NNE	1.401E-08	3.379E-09	9.844E-10	4.665E-10	2.732E-10	1.086E-10	3.321E-11	1.495E-11	9.662E-12	8.061E-12

NE	1.415E-08	3.753E-09	1.152E-09	5.545E-10	3.262E-10	1.294E-10	3.874E-11	1.696E-11	1.035E-11	7.452E-12
ENE	8.927E-09	2.425E-09	7.691E-10	3.782E-10	2.247E-10	9.036E-11	2.782E-11	1.251E-11	7.808E-12	5.651E-12
E	7.637E-09	2.019E-09	6.284E-10	3.082E-10	1.833E-10	7.411E-11	2.309E-11	1.054E-11	6.586E-12	4.648E-12
ESE	8.150E-09	2.102E-09	6.420E-10	3.129E-10	1.857E-10	7.515E-11	2.352E-11	1.088E-11	7.021E-12	5.140E-12
SE	6.940E-09	1.800E-09	5.550E-10	2.717E-10	1.616E-10	6.545E-11	2.053E-11	9.466E-12	6.005E-12	4.364E-12
SSE	6.644E-09	1.752E-09	5.454E-10	2.668E-10	1.583E-10	6.397E-11	2.008E-11	1.440E-11	1.155E-11	6.887E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

0Fermi COL A

0Reactor Bldg/Fuel Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE TYPE OF ID	LOCATION	DIRECTION	DIST. FROM SITE (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Site Boundary	S	.70	3.0E-07	3.0E-07	2.8E-07	6.2E-09
	Site Boundary	SSW	.72	2.3E-07	2.3E-07	2.1E-07	5.0E-09
	Site Boundary	SW	.90	2.4E-07	2.4E-07	2.3E-07	4.9E-09
	Site Boundary	WSW	.80	2.7E-07	2.7E-07	2.5E-07	6.7E-09
	Site Boundary	W	.59	4.6E-07	4.6E-07	4.3E-07	1.2E-08
	Site Boundary	WNW	.57	5.0E-07	5.0E-07	4.7E-07	1.4E-08
	Site Boundary	NW	.57	4.9E-07	4.9E-07	4.6E-07	1.4E-08
	Site Boundary	NNW	.57	4.5E-07	4.5E-07	4.2E-07	1.1E-08
	Site Boundary	N	.66	4.3E-07	4.3E-07	3.9E-07	8.6E-09
	Site Boundary	NNE	.95	4.9E-07	4.9E-07	4.5E-07	8.6E-09
	Site Boundary	NE	1.28	2.8E-07	2.8E-07	2.6E-07	4.8E-09
	Site Boundary	SSE	.70	2.9E-07	2.9E-07	2.8E-07	7.7E-09
	Residence	SSE	.92	2.0E-07	2.0E-07	1.9E-07	4.7E-09
	Residence	SSW	.90	1.7E-07	1.7E-07	1.6E-07	3.3E-09
	Residence	SW	1.00	2.1E-07	2.1E-07	2.0E-07	3.9E-09
	Residence	WSW	1.13	1.6E-07	1.6E-07	1.5E-07	3.1E-09
	Residence	W	.98	2.3E-07	2.2E-07	2.1E-07	4.8E-09
	Residence	NW	.69	3.8E-07	3.8E-07	3.6E-07	1.1E-08
	Residence	NW	1.07	1.9E-07	1.9E-07	1.7E-07	4.3E-09
	Residence	NNW	1.19	1.4E-07	1.4E-07	1.3E-07	2.5E-09
	Residence	NNE	1.32	2.8E-07	2.8E-07	2.6E-07	4.0E-09
	Residence	NNE	1.31	2.9E-07	2.9E-07	2.6E-07	4.1E-09
	Residence	NE	1.36	2.6E-07	2.6E-07	2.4E-07	4.2E-09
	Garden	S	1.28	1.2E-07	1.2E-07	1.1E-07	1.8E-09
	Garden	WSW	2.14	5.7E-08	5.6E-08	5.2E-08	7.4E-10
	Garden	W	1.50	1.1E-07	1.1E-07	1.0E-07	1.8E-09
	Garden	NW	.69	3.8E-07	3.8E-07	3.6E-07	1.1E-08
	Garden	NNW	1.09	1.6E-07	1.6E-07	1.5E-07	3.1E-09
	Garden	NNW	1.46	1.0E-07	1.0E-07	9.4E-08	1.5E-09

Garden	N	2.31	6.9E-08	6.9E-08	6.4E-08	5.5E-10
Garden	NNE	2.16	1.3E-07	1.3E-07	1.2E-07	1.3E-09
Garden	NE	2.24	1.3E-07	1.3E-07	1.2E-07	1.4E-09
Sheep	NNW	4.46	2.0E-08	2.0E-08	1.8E-08	1.3E-10
Sheep	NNE	4.50	4.8E-08	4.7E-08	4.3E-08	2.7E-10
Goat	WNW	2.30	6.1E-08	6.1E-08	5.6E-08	7.7E-10
Goat	NNW	3.08	3.4E-08	3.3E-08	3.1E-08	2.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Turbine Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.573E-06	5.571E-07	3.247E-07	1.841E-07	9.270E-08	5.992E-08	4.328E-08	3.333E-08	2.679E-08	2.220E-08	1.884E-08
SSW	1.104E-06	4.051E-07	2.451E-07	1.456E-07	7.866E-08	5.255E-08	3.847E-08	2.975E-08	2.390E-08	1.976E-08	1.670E-08
SW	1.318E-06	4.872E-07	2.977E-07	1.813E-07	9.805E-08	6.392E-08	4.564E-08	3.455E-08	2.726E-08	2.220E-08	1.853E-08
WSW	1.323E-06	4.817E-07	2.832E-07	1.662E-07	8.516E-08	5.372E-08	3.757E-08	2.805E-08	2.193E-08	1.773E-08	1.488E-08
W	1.817E-06	6.197E-07	3.540E-07	2.008E-07	9.768E-08	6.007E-08	4.147E-08	3.074E-08	2.394E-08	1.932E-08	1.602E-08
WNW	2.105E-06	6.935E-07	3.838E-07	2.173E-07	1.078E-07	6.733E-08	4.700E-08	3.514E-08	2.754E-08	2.235E-08	1.863E-08
NW	2.048E-06	6.823E-07	3.660E-07	2.013E-07	9.813E-08	6.110E-08	4.269E-08	3.199E-08	2.515E-08	2.048E-08	1.719E-08
NNW	2.002E-06	6.562E-07	3.513E-07	1.905E-07	9.135E-08	5.698E-08	4.013E-08	3.036E-08	2.409E-08	1.978E-08	1.683E-08
N	2.181E-06	7.420E-07	4.171E-07	2.323E-07	1.151E-07	7.346E-08	5.261E-08	4.028E-08	3.224E-08	2.664E-08	2.267E-08
NNE	4.422E-06	1.508E-06	8.504E-07	4.635E-07	2.193E-07	1.357E-07	9.519E-08	7.183E-08	5.804E-08	4.850E-08	4.096E-08
NE	3.110E-06	1.134E-06	6.726E-07	3.879E-07	2.001E-07	1.299E-07	9.351E-08	7.161E-08	5.720E-08	4.714E-08	3.978E-08
ENE	2.042E-06	7.337E-07	4.306E-07	2.553E-07	1.436E-07	9.960E-08	7.510E-08	5.947E-08	4.872E-08	4.094E-08	3.510E-08
E	1.442E-06	5.426E-07	3.192E-07	1.880E-07	1.052E-07	7.297E-08	5.525E-08	4.397E-08	3.620E-08	3.057E-08	2.633E-08
ESE	1.870E-06	6.580E-07	3.707E-07	2.113E-07	1.132E-07	7.711E-08	5.792E-08	4.597E-08	3.785E-08	3.200E-08	2.762E-08
SE	1.564E-06	5.521E-07	3.121E-07	1.797E-07	9.864E-08	6.803E-08	5.134E-08	4.077E-08	3.352E-08	2.827E-08	2.432E-08
SSE	1.629E-06	5.764E-07	3.336E-07	1.928E-07	1.024E-07	6.829E-08	5.016E-08	3.900E-08	3.153E-08	2.623E-08	2.232E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.629E-08	9.906E-09	7.108E-09	4.640E-09	3.432E-09	2.722E-09	2.257E-09	1.931E-09	1.689E-09	1.503E-09	1.353E-09
SSW	1.438E-08	8.497E-09	5.942E-09	3.718E-09	2.657E-09	2.045E-09	1.651E-09	1.379E-09	1.181E-09	1.031E-09	9.131E-10
SW	1.578E-08	8.905E-09	6.043E-09	3.631E-09	2.521E-09	1.897E-09	1.504E-09	1.236E-09	1.043E-09	8.979E-10	7.857E-10
WSW	1.275E-08	7.155E-09	4.855E-09	2.930E-09	2.045E-09	1.546E-09	1.230E-09	1.013E-09	8.561E-10	7.374E-10	6.445E-10
W	1.359E-08	7.876E-09	5.494E-09	3.468E-09	2.497E-09	1.916E-09	1.518E-09	1.236E-09	1.034E-09	8.845E-10	7.692E-10
WNW	1.586E-08	9.499E-09	6.827E-09	4.563E-09	3.426E-09	2.668E-09	2.110E-09	1.725E-09	1.450E-09	1.244E-09	1.086E-09
NW	1.475E-08	8.826E-09	6.345E-09	4.247E-09	3.235E-09	2.617E-09	2.175E-09	1.827E-09	1.548E-09	1.334E-09	1.167E-09

NNW	1.462E-08	9.238E-09	6.909E-09	4.854E-09	3.763E-09	3.016E-09	2.434E-09	2.000E-09	1.685E-09	1.450E-09	1.268E-09
N	1.968E-08	1.239E-08	9.153E-09	6.258E-09	4.770E-09	3.832E-09	3.156E-09	2.628E-09	2.212E-09	1.898E-09	1.655E-09
NNE	3.531E-08	2.063E-08	1.444E-08	9.098E-09	6.541E-09	5.057E-09	4.096E-09	3.428E-09	2.938E-09	2.565E-09	2.272E-09
NE	3.424E-08	2.018E-08	1.416E-08	8.933E-09	6.428E-09	4.974E-09	4.034E-09	3.381E-09	2.904E-09	2.540E-09	2.255E-09
ENE	3.061E-08	1.888E-08	1.360E-08	8.877E-09	6.532E-09	5.146E-09	4.238E-09	3.601E-09	3.131E-09	2.771E-09	2.488E-09
E	2.306E-08	1.429E-08	1.031E-08	6.730E-09	4.938E-09	3.869E-09	3.164E-09	2.667E-09	2.298E-09	2.015E-09	1.791E-09
ESE	2.425E-08	1.530E-08	1.123E-08	7.539E-09	5.662E-09	4.529E-09	3.772E-09	3.234E-09	2.831E-09	2.519E-09	2.270E-09
SE	2.128E-08	1.325E-08	9.606E-09	6.321E-09	4.678E-09	3.700E-09	3.056E-09	2.603E-09	2.267E-09	2.010E-09	1.806E-09
SSE	1.934E-08	1.201E-08	8.768E-09	5.931E-09	4.552E-09	3.746E-09	3.216E-09	2.836E-09	2.542E-09	2.300E-09	2.092E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.139E-07	9.845E-08	4.374E-08	2.691E-08	1.889E-08	1.008E-08	4.652E-09	2.725E-09	1.932E-09	1.503E-09
SSW	2.364E-07	8.194E-08	3.873E-08	2.399E-08	1.675E-08	8.669E-09	3.740E-09	2.051E-09	1.382E-09	1.032E-09
SW	2.881E-07	1.014E-07	4.608E-08	2.742E-08	1.860E-08	9.159E-09	3.674E-09	1.906E-09	1.239E-09	8.993E-10
WSW	2.753E-07	8.920E-08	3.807E-08	2.208E-08	1.494E-08	7.376E-09	2.965E-09	1.553E-09	1.015E-09	7.382E-10
W	3.450E-07	1.039E-07	4.214E-08	2.412E-08	1.610E-08	8.087E-09	3.487E-09	1.912E-09	1.240E-09	8.862E-10
WNW	3.787E-07	1.141E-07	4.768E-08	2.774E-08	1.871E-08	9.725E-09	4.561E-09	2.647E-09	1.730E-09	1.247E-09
NW	3.631E-07	1.046E-07	4.332E-08	2.533E-08	1.726E-08	9.039E-09	4.264E-09	2.605E-09	1.820E-09	1.335E-09
NNW	3.476E-07	9.810E-08	4.071E-08	2.424E-08	1.689E-08	9.400E-09	4.826E-09	2.982E-09	2.004E-09	1.452E-09
N	4.072E-07	1.226E-07	5.324E-08	3.240E-08	2.274E-08	1.257E-08	6.240E-09	3.812E-09	2.620E-09	1.901E-09
NNE	8.247E-07	2.364E-07	9.665E-08	5.835E-08	4.110E-08	2.114E-08	9.148E-09	5.069E-09	3.432E-09	2.567E-09
NE	6.486E-07	2.106E-07	9.445E-08	5.748E-08	3.991E-08	2.063E-08	8.981E-09	4.986E-09	3.386E-09	2.542E-09
ENE	4.200E-07	1.488E-07	7.538E-08	4.883E-08	3.517E-08	1.914E-08	8.885E-09	5.153E-09	3.604E-09	2.773E-09
E	3.105E-07	1.093E-07	5.547E-08	3.628E-08	2.637E-08	1.447E-08	6.730E-09	3.872E-09	2.668E-09	2.016E-09
ESE	3.637E-07	1.190E-07	5.826E-08	3.794E-08	2.767E-08	1.548E-08	7.525E-09	4.528E-09	3.234E-09	2.519E-09
SE	3.066E-07	1.030E-07	5.156E-08	3.359E-08	2.436E-08	1.341E-08	6.320E-09	3.703E-09	2.605E-09	2.011E-09
SSE	3.250E-07	1.073E-07	5.053E-08	3.164E-08	2.238E-08	1.220E-08	5.948E-09	3.749E-09	2.833E-09	2.295E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.237E+01	9.237E+01	9.237E+01	9.237E+01	9.237E+01	8.933E+01	8.130E+01	7.178E+01	6.200E+01	5.214E+01
SSW	9.181E+01	9.142E+01	9.142E+01	9.142E+01	9.142E+01	8.905E+01	8.279E+01	7.536E+01	6.774E+01	6.006E+01
SW	8.991E+01	8.915E+01	8.915E+01	8.915E+01	8.915E+01	8.691E+01	8.101E+01	7.400E+01	6.680E+01	5.955E+01
WSW	8.694E+01	8.600E+01	8.600E+01	8.600E+01	8.439E+01	7.894E+01	6.823E+01	5.553E+01	4.249E+01	2.933E+01
W	8.153E+01	8.022E+01	8.022E+01	8.022E+01	8.022E+01	7.063E+01	4.534E+01	1.631E+01	2.086E+00	9.013E-01
WNW	8.411E+01	8.258E+01	8.258E+01	8.258E+01	8.258E+01	7.137E+01	4.181E+01	1.113E+01	1.006E+00	5.691E-01
NW	8.818E+01	8.688E+01	8.688E+01	8.688E+01	8.634E+01	7.821E+01	5.801E+01	3.404E+01	1.178E+01	2.957E+00
NNW	8.811E+01	8.717E+01	8.717E+01	8.717E+01	8.610E+01	7.488E+01	4.772E+01	1.685E+01	2.338E+00	1.160E+00

N	8.907E+01	8.833E+01	8.833E+01	8.833E+01	8.780E+01	7.895E+01	5.683E+01	3.059E+01	8.600E+00	2.056E+00
NNE	8.938E+01	8.941E+01	8.941E+01	8.723E+01	8.490E+01	8.329E+01	8.026E+01	7.667E+01	7.299E+01	6.927E+01
NE	9.110E+01	9.112E+01	9.112E+01	9.112E+01	9.112E+01	8.963E+01	8.570E+01	8.104E+01	7.626E+01	7.143E+01
ENE	9.526E+01	9.527E+01	9.527E+01	9.527E+01	9.527E+01	9.378E+01	8.985E+01	8.518E+01	8.039E+01	7.556E+01
E	9.725E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01
ESE	9.564E+01	9.565E+01	9.565E+01	9.565E+01	9.565E+01	9.517E+01	9.392E+01	9.244E+01	9.091E+01	8.937E+01
SE	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.475E+01	9.224E+01	8.927E+01	8.622E+01	8.314E+01
SSE	9.413E+01	9.413E+01	9.413E+01	9.413E+01	9.413E+01	8.952E+01	7.736E+01	6.293E+01	4.812E+01	3.319E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.572E-06	5.565E-07	3.242E-07	1.838E-07	9.244E-08	5.970E-08	4.307E-08	3.314E-08	2.661E-08	2.203E-08	1.867E-08
SSW	1.104E-06	4.047E-07	2.447E-07	1.454E-07	7.844E-08	5.236E-08	3.829E-08	2.958E-08	2.375E-08	1.961E-08	1.656E-08
SW	1.317E-06	4.867E-07	2.973E-07	1.810E-07	9.780E-08	6.371E-08	4.545E-08	3.437E-08	2.710E-08	2.204E-08	1.838E-08
WSW	1.323E-06	4.813E-07	2.828E-07	1.659E-07	8.496E-08	5.355E-08	3.742E-08	2.792E-08	2.180E-08	1.761E-08	1.477E-08
W	1.817E-06	6.192E-07	3.536E-07	2.005E-07	9.746E-08	5.989E-08	4.131E-08	3.060E-08	2.380E-08	1.919E-08	1.590E-08
WNW	2.104E-06	6.929E-07	3.834E-07	2.170E-07	1.075E-07	6.711E-08	4.681E-08	3.497E-08	2.739E-08	2.221E-08	1.849E-08
NW	2.047E-06	6.816E-07	3.654E-07	2.009E-07	9.785E-08	6.087E-08	4.249E-08	3.181E-08	2.498E-08	2.032E-08	1.704E-08
NNW	2.001E-06	6.555E-07	3.508E-07	1.901E-07	9.109E-08	5.677E-08	3.994E-08	3.019E-08	2.393E-08	1.964E-08	1.669E-08
N	2.180E-06	7.412E-07	4.165E-07	2.319E-07	1.147E-07	7.318E-08	5.235E-08	4.003E-08	3.201E-08	2.642E-08	2.246E-08
NNE	4.420E-06	1.507E-06	8.493E-07	4.627E-07	2.187E-07	1.352E-07	9.477E-08	7.145E-08	5.768E-08	4.816E-08	4.062E-08
NE	3.108E-06	1.133E-06	6.716E-07	3.872E-07	1.996E-07	1.295E-07	9.311E-08	7.124E-08	5.685E-08	4.680E-08	3.946E-08
ENE	2.041E-06	7.328E-07	4.299E-07	2.547E-07	1.431E-07	9.919E-08	7.472E-08	5.910E-08	4.836E-08	4.059E-08	3.477E-08
E	1.442E-06	5.419E-07	3.186E-07	1.876E-07	1.048E-07	7.266E-08	5.495E-08	4.368E-08	3.592E-08	3.029E-08	2.605E-08
ESE	1.869E-06	6.572E-07	3.701E-07	2.109E-07	1.129E-07	7.678E-08	5.761E-08	4.567E-08	3.756E-08	3.172E-08	2.734E-08
SE	1.563E-06	5.514E-07	3.116E-07	1.793E-07	9.833E-08	6.774E-08	5.107E-08	4.051E-08	3.327E-08	2.802E-08	2.408E-08
SSE	1.628E-06	5.758E-07	3.331E-07	1.924E-07	1.021E-07	6.803E-08	4.991E-08	3.877E-08	3.131E-08	2.602E-08	2.211E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.613E-08	9.755E-09	6.962E-09	4.496E-09	3.289E-09	2.580E-09	2.117E-09	1.792E-09	1.551E-09	1.365E-09	1.217E-09
SSW	1.425E-08	8.379E-09	5.831E-09	3.613E-09	2.556E-09	1.948E-09	1.558E-09	1.288E-09	1.092E-09	9.437E-10	8.275E-10
SW	1.563E-08	8.780E-09	5.927E-09	3.523E-09	2.420E-09	1.801E-09	1.412E-09	1.147E-09	9.574E-10	8.155E-10	7.060E-10
WSW	1.264E-08	7.058E-09	4.765E-09	2.845E-09	1.964E-09	1.468E-09	1.155E-09	9.411E-10	7.866E-10	6.702E-10	5.797E-10
W	1.347E-08	7.774E-09	5.396E-09	3.372E-09	2.405E-09	1.827E-09	1.434E-09	1.156E-09	9.589E-10	8.125E-10	7.003E-10
WNW	1.573E-08	9.382E-09	6.713E-09	4.444E-09	3.305E-09	2.548E-09	1.996E-09	1.617E-09	1.346E-09	1.145E-09	9.903E-10
NW	1.460E-08	8.693E-09	6.214E-09	4.111E-09	3.095E-09	2.475E-09	2.033E-09	1.689E-09	1.414E-09	1.205E-09	1.044E-09
NNW	1.449E-08	9.105E-09	6.773E-09	4.705E-09	3.604E-09	2.852E-09	2.272E-09	1.845E-09	1.538E-09	1.308E-09	1.132E-09
N	1.947E-08	1.218E-08	8.947E-09	6.039E-09	4.544E-09	3.603E-09	2.930E-09	2.409E-09	2.003E-09	1.698E-09	1.463E-09
NNE	3.498E-08	2.034E-08	1.416E-08	8.828E-09	6.279E-09	4.802E-09	3.848E-09	3.186E-09	2.703E-09	2.335E-09	2.048E-09
NE	3.393E-08	1.990E-08	1.389E-08	8.667E-09	6.167E-09	4.718E-09	3.784E-09	3.135E-09	2.662E-09	2.303E-09	2.022E-09
ENE	3.028E-08	1.857E-08	1.330E-08	8.566E-09	6.224E-09	4.840E-09	3.935E-09	3.300E-09	2.833E-09	2.475E-09	2.193E-09
E	2.279E-08	1.403E-08	1.006E-08	6.474E-09	4.684E-09	3.619E-09	2.919E-09	2.427E-09	2.063E-09	1.784E-09	1.564E-09
ESE	2.397E-08	1.503E-08	1.096E-08	7.267E-09	5.388E-09	4.254E-09	3.498E-09	2.961E-09	2.559E-09	2.248E-09	2.001E-09
SE	2.104E-08	1.302E-08	9.385E-09	6.100E-09	4.458E-09	3.483E-09	2.841E-09	2.390E-09	2.056E-09	1.800E-09	1.597E-09
SSE	1.915E-08	1.182E-08	8.580E-09	5.734E-09	4.348E-09	3.534E-09	2.997E-09	2.611E-09	2.312E-09	2.067E-09	1.857E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 71.30 REP. WIND HEIGHT (METERS) 71.3

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     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                                 /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)           /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                       /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556                  /      ELEVATED        LESS THAN  1.332              LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780       /      MIXED           BETWEEN    1.332 AND  6.659   BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780                  /      GROUND LEVEL    ABOVE      6.659              ABOVE     10.881
USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0            RUN DATE:  6-26-2008    17:11

Fermi COL A

 Turbine Bldg Stack
  2.260 DAY DECAY,  UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
                                                SEGMENT BOUNDARIES IN MILES FROM THE SITE
DIRECTION .5-1     1-2       2-3       3-4       4-5       5-10      10-20     20-30     30-40     40-50
 FROM SITE
    S 3.134E-07 9.818E-08 4.353E-08 2.673E-08 1.872E-08 9.930E-09 4.507E-09 2.584E-09 1.793E-09 1.366E-09
  SSW 2.361E-07 8.172E-08 3.856E-08 2.384E-08 1.661E-08 8.551E-09 3.636E-09 1.954E-09 1.291E-09 9.447E-10
   SW 2.877E-07 1.011E-07 4.589E-08 2.725E-08 1.845E-08 9.035E-09 3.567E-09 1.810E-09 1.150E-09 8.170E-10
  WSW 2.750E-07 8.900E-08 3.792E-08 2.195E-08 1.482E-08 7.280E-09 2.880E-09 1.475E-09 9.434E-10 6.712E-10
    W 3.446E-07 1.037E-07 4.198E-08 2.399E-08 1.598E-08 7.984E-09 3.392E-09 1.824E-09 1.160E-09 8.143E-10
  WNW 3.782E-07 1.139E-07 4.749E-08 2.758E-08 1.857E-08 9.607E-09 4.442E-09 2.529E-09 1.622E-09 1.147E-09
   NW 3.626E-07 1.043E-07 4.312E-08 2.516E-08 1.711E-08 8.905E-09 4.127E-09 2.464E-09 1.683E-09 1.207E-09
  NNW 3.471E-07 9.783E-08 4.053E-08 2.408E-08 1.675E-08 9.265E-09 4.675E-09 2.820E-09 1.850E-09 1.311E-09
    N 4.066E-07 1.223E-07 5.298E-08 3.217E-08 2.253E-08 1.236E-08 6.021E-09 3.585E-09 2.403E-09 1.701E-09
  NNE 8.236E-07 2.358E-07 9.623E-08 5.799E-08 4.077E-08 2.085E-08 8.879E-09 4.814E-09 3.191E-09 2.338E-09
   NE 6.477E-07 2.101E-07 9.405E-08 5.713E-08 3.959E-08 2.035E-08 8.716E-09 4.731E-09 3.140E-09 2.305E-09
  ENE 4.193E-07 1.484E-07 7.500E-08 4.847E-08 3.483E-08 1.883E-08 8.576E-09 4.847E-09 3.303E-09 2.477E-09
    E 3.100E-07 1.089E-07 5.517E-08 3.599E-08 2.610E-08 1.421E-08 6.475E-09 3.623E-09 2.429E-09 1.785E-09
  ESE 3.631E-07 1.186E-07 5.795E-08 3.765E-08 2.739E-08 1.521E-08 7.254E-09 4.254E-09 2.961E-09 2.249E-09
   SE 3.061E-07 1.027E-07 5.129E-08 3.334E-08 2.412E-08 1.319E-08 6.100E-09 3.486E-09 2.391E-09 1.800E-09
  SSE 3.245E-07 1.070E-07 5.028E-08 3.142E-08 2.217E-08 1.201E-08 5.750E-09 3.536E-09 2.607E-09 2.062E-09

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Fermi COL A


Turbine Bldg Stack

  8.000 DAY DECAY,    DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)                DISTANCE IN  MILES FROM THE SITE
   SECTOR          .250      .500      .750     1.000     1.500     2.000     2.500     3.000     3.500     4.000     4.500

       S        1.495E-06 5.155E-07 2.958E-07 1.670E-07 8.398E-08 5.425E-08 3.911E-08 3.004E-08 2.407E-08 1.989E-08 1.682E-08
     SSW        1.052E-06 3.756E-07 2.242E-07 1.332E-07 7.228E-08 4.835E-08 3.534E-08 2.725E-08 2.182E-08 1.797E-08 1.514E-08
      SW        1.258E-06 4.527E-07 2.733E-07 1.670E-07 9.064E-08 5.901E-08 4.196E-08 3.160E-08 2.480E-08 2.009E-08 1.667E-08
     WSW        1.266E-06 4.487E-07 2.600E-07 1.526E-07 7.816E-08 4.913E-08 3.419E-08 2.538E-08 1.972E-08 1.586E-08 1.325E-08
       W        1.735E-06 5.743E-07 3.226E-07 1.822E-07 8.814E-08 5.389E-08 3.696E-08 2.723E-08 2.107E-08 1.690E-08 1.394E-08
     WNW        2.017E-06 6.464E-07 3.512E-07 1.980E-07 9.781E-08 6.083E-08 4.223E-08 3.139E-08 2.447E-08 1.975E-08 1.637E-08
      NW        1.966E-06 6.393E-07 3.364E-07 1.837E-07 8.905E-08 5.515E-08 3.831E-08 2.855E-08 2.232E-08 1.808E-08 1.510E-08
     NNW        1.916E-06 6.115E-07 3.206E-07 1.723E-07 8.208E-08 5.098E-08 3.576E-08 2.695E-08 2.131E-08 1.743E-08 1.480E-08
       N        2.081E-06 6.882E-07 3.794E-07 2.099E-07 1.037E-07 6.613E-08 4.729E-08 3.614E-08 2.886E-08 2.379E-08 2.021E-08
     NNE        4.208E-06 1.393E-06 7.701E-07 4.161E-07 1.955E-07 1.206E-07 8.430E-08 6.342E-08 5.120E-08 4.275E-08 3.601E-08
      NE        2.961E-06 1.050E-06 6.141E-07 3.535E-07 1.828E-07 1.186E-07 8.521E-08 6.506E-08 5.180E-08 4.254E-08 3.578E-08
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ENE	1.952E-06	6.836E-07	3.953E-07	2.343E-07	1.327E-07	9.230E-08	6.959E-08	5.501E-08	4.497E-08	3.770E-08	3.224E-08
E	1.383E-06	5.096E-07	2.955E-07	1.738E-07	9.762E-08	6.789E-08	5.138E-08	4.083E-08	3.354E-08	2.825E-08	2.427E-08
ESE	1.792E-06	6.158E-07	3.413E-07	1.938E-07	1.041E-07	7.101E-08	5.334E-08	4.230E-08	3.477E-08	2.934E-08	2.528E-08
SE	1.499E-06	5.170E-07	2.874E-07	1.649E-07	9.094E-08	6.288E-08	4.747E-08	3.765E-08	3.090E-08	2.600E-08	2.232E-08
SSE	1.555E-06	5.367E-07	3.059E-07	1.763E-07	9.388E-08	6.263E-08	4.593E-08	3.561E-08	2.870E-08	2.380E-08	2.018E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.450E-08	8.725E-09	6.203E-09	3.995E-09	2.925E-09	2.302E-09	1.898E-09	1.615E-09	1.401E-09	1.236E-09	1.100E-09
SSW	1.299E-08	7.566E-09	5.227E-09	3.209E-09	2.259E-09	1.718E-09	1.373E-09	1.136E-09	9.613E-10	8.305E-10	7.271E-10
SW	1.412E-08	7.805E-09	5.201E-09	3.034E-09	2.056E-09	1.516E-09	1.181E-09	9.538E-10	7.905E-10	6.696E-10	5.761E-10
WSW	1.130E-08	6.202E-09	4.130E-09	2.418E-09	1.648E-09	1.220E-09	9.501E-10	7.608E-10	6.228E-10	5.200E-10	4.410E-10
W	1.175E-08	6.700E-09	4.608E-09	2.844E-09	1.966E-09	1.439E-09	1.097E-09	8.621E-10	6.987E-10	5.798E-10	4.903E-10
WNW	1.387E-08	8.200E-09	5.833E-09	3.826E-09	2.731E-09	2.032E-09	1.549E-09	1.224E-09	9.966E-10	8.307E-10	7.053E-10
NW	1.290E-08	7.611E-09	5.406E-09	3.563E-09	2.660E-09	2.064E-09	1.644E-09	1.334E-09	1.094E-09	9.154E-10	7.793E-10
NNW	1.283E-08	8.071E-09	6.013E-09	4.195E-09	3.115E-09	2.373E-09	1.844E-09	1.465E-09	1.196E-09	9.996E-10	8.503E-10
N	1.751E-08	1.098E-08	8.087E-09	5.494E-09	4.127E-09	3.175E-09	2.501E-09	2.012E-09	1.643E-09	1.371E-09	1.164E-09
NNE	3.096E-08	1.788E-08	1.238E-08	7.661E-09	5.426E-09	4.141E-09	3.316E-09	2.745E-09	2.320E-09	2.001E-09	1.749E-09
NE	3.069E-08	1.787E-08	1.240E-08	7.686E-09	5.453E-09	4.170E-09	3.348E-09	2.780E-09	2.359E-09	2.041E-09	1.791E-09
ENE	2.804E-08	1.712E-08	1.223E-08	7.874E-09	5.732E-09	4.475E-09	3.657E-09	3.085E-09	2.656E-09	2.330E-09	2.070E-09
E	2.120E-08	1.300E-08	9.298E-09	5.974E-09	4.327E-09	3.352E-09	2.714E-09	2.266E-09	1.935E-09	1.683E-09	1.483E-09
ESE	2.214E-08	1.386E-08	1.011E-08	6.709E-09	4.993E-09	3.962E-09	3.277E-09	2.791E-09	2.429E-09	2.150E-09	1.926E-09
SE	1.948E-08	1.202E-08	8.643E-09	5.612E-09	4.109E-09	3.221E-09	2.640E-09	2.232E-09	1.930E-09	1.699E-09	1.513E-09
SSE	1.744E-08	1.072E-08	7.765E-09	5.200E-09	3.969E-09	3.257E-09	2.792E-09	2.448E-09	2.147E-09	1.892E-09	1.675E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

Fermi COL A

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.874E-07	8.922E-08	3.952E-08	2.418E-08	1.687E-08	8.888E-09	4.010E-09	2.307E-09	1.614E-09	1.234E-09
SSW	2.174E-07	7.519E-08	3.557E-08	2.190E-08	1.518E-08	7.731E-09	3.235E-09	1.724E-09	1.137E-09	8.310E-10
SW	2.659E-07	9.354E-08	4.236E-08	2.495E-08	1.674E-08	8.051E-09	3.081E-09	1.526E-09	9.565E-10	6.708E-10
WSW	2.542E-07	8.179E-08	3.465E-08	1.987E-08	1.330E-08	6.413E-09	2.456E-09	1.226E-09	7.623E-10	5.212E-10
W	3.161E-07	9.381E-08	3.758E-08	2.124E-08	1.401E-08	6.893E-09	2.846E-09	1.443E-09	8.668E-10	5.819E-10
WNW	3.487E-07	1.036E-07	4.286E-08	2.465E-08	1.645E-08	8.408E-09	3.785E-09	2.025E-09	1.230E-09	8.334E-10
NW	3.359E-07	9.502E-08	3.890E-08	2.248E-08	1.517E-08	7.806E-09	3.571E-09	2.055E-09	1.331E-09	9.180E-10
NNW	3.193E-07	8.831E-08	3.630E-08	2.144E-08	1.485E-08	8.213E-09	4.119E-09	2.359E-09	1.471E-09	1.003E-09
N	3.727E-07	1.106E-07	4.785E-08	2.901E-08	2.027E-08	1.115E-08	5.463E-09	3.159E-09	2.011E-09	1.375E-09
NNE	7.513E-07	2.112E-07	8.562E-08	5.147E-08	3.614E-08	1.834E-08	7.716E-09	4.154E-09	2.746E-09	2.002E-09
NE	5.953E-07	1.922E-07	8.606E-08	5.206E-08	3.590E-08	1.828E-08	7.740E-09	4.183E-09	2.782E-09	2.043E-09
ENE	3.878E-07	1.373E-07	6.981E-08	4.507E-08	3.230E-08	1.738E-08	7.891E-09	4.483E-09	3.085E-09	2.330E-09
E	2.890E-07	1.013E-07	5.156E-08	3.361E-08	2.431E-08	1.318E-08	5.981E-09	3.357E-09	2.268E-09	1.684E-09

ESE	3.367E-07	1.093E-07	5.364E-08	3.485E-08	2.532E-08	1.403E-08	6.702E-09	3.963E-09	2.792E-09	2.149E-09
SE	2.840E-07	9.491E-08	4.765E-08	3.096E-08	2.236E-08	1.218E-08	5.617E-09	3.225E-09	2.233E-09	1.699E-09
SSE	2.996E-07	9.830E-08	4.626E-08	2.881E-08	2.024E-08	1.090E-08	5.223E-09	3.261E-09	2.432E-09	1.887E-09

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Fermi COL A

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.686E-08	8.051E-09	5.067E-09	2.798E-09	1.135E-09	6.278E-10	3.993E-10	2.765E-10	2.026E-10	1.546E-10	1.216E-10
SSW	1.316E-08	6.443E-09	4.160E-09	2.351E-09	9.760E-10	5.470E-10	3.508E-10	2.442E-10	1.795E-10	1.372E-10	1.080E-10
SW	1.725E-08	8.478E-09	5.696E-09	3.248E-09	1.363E-09	7.667E-10	4.927E-10	3.434E-10	2.525E-10	1.931E-10	1.521E-10
WSW	2.019E-08	1.033E-08	6.498E-09	3.546E-09	1.422E-09	7.750E-10	4.880E-10	3.358E-10	2.451E-10	1.867E-10	1.522E-10
W	2.785E-08	1.366E-08	8.194E-09	4.562E-09	1.782E-09	9.363E-10	5.739E-10	3.876E-10	2.795E-10	2.111E-10	1.652E-10
WNW	2.835E-08	1.480E-08	9.606E-09	5.006E-09	1.911E-09	1.006E-09	6.187E-10	4.194E-10	3.034E-10	2.300E-10	1.805E-10
NW	2.615E-08	1.417E-08	8.852E-09	4.744E-09	1.772E-09	9.294E-10	5.710E-10	3.872E-10	2.805E-10	2.129E-10	1.675E-10
NNW	2.258E-08	1.175E-08	7.219E-09	3.748E-09	1.385E-09	7.254E-10	4.455E-10	3.021E-10	2.189E-10	1.662E-10	1.326E-10
N	2.314E-08	1.122E-08	6.940E-09	3.651E-09	1.387E-09	7.372E-10	4.570E-10	3.115E-10	2.262E-10	1.718E-10	1.350E-10
NNE	5.031E-08	2.298E-08	1.382E-08	7.254E-09	2.776E-09	1.477E-09	9.164E-10	6.246E-10	4.532E-10	3.478E-10	2.728E-10
NE	4.297E-08	2.033E-08	1.279E-08	7.090E-09	2.899E-09	1.607E-09	1.023E-09	7.090E-10	5.196E-10	3.964E-10	3.118E-10
ENE	2.496E-08	1.315E-08	8.603E-09	4.843E-09	1.982E-09	1.107E-09	7.092E-10	4.936E-10	3.629E-10	2.777E-10	2.189E-10
E	2.071E-08	1.147E-08	7.499E-09	4.157E-09	1.658E-09	9.153E-10	5.820E-10	4.034E-10	2.961E-10	2.264E-10	1.786E-10
ESE	2.303E-08	1.263E-08	8.144E-09	4.444E-09	1.741E-09	9.499E-10	5.995E-10	4.137E-10	3.029E-10	2.313E-10	1.824E-10
SE	1.963E-08	1.083E-08	7.004E-09	3.836E-09	1.508E-09	8.253E-10	5.220E-10	3.606E-10	2.642E-10	2.018E-10	1.592E-10
SSE	1.920E-08	1.009E-08	6.506E-09	3.598E-09	1.442E-09	7.957E-10	5.058E-10	3.504E-10	2.570E-10	1.964E-10	1.548E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.806E-11	4.663E-11	2.858E-11	1.510E-11	9.602E-12	6.883E-12	5.292E-12	4.267E-12	3.824E-12	3.584E-12	4.441E-12
SSW	8.711E-11	4.152E-11	2.560E-11	1.337E-11	8.481E-12	6.055E-12	4.632E-12	3.713E-12	3.089E-12	2.615E-12	2.369E-12
SW	1.226E-10	5.914E-11	3.592E-11	1.882E-11	1.185E-11	8.397E-12	6.361E-12	5.037E-12	4.136E-12	3.465E-12	3.046E-12
WSW	1.226E-10	5.785E-11	3.480E-11	1.810E-11	1.148E-11	8.187E-12	7.718E-12	7.168E-12	5.796E-12	4.697E-12	3.813E-12
W	1.329E-10	6.210E-11	3.764E-11	2.490E-11	2.010E-11	1.404E-11	9.906E-12	7.475E-12	5.814E-12	4.646E-12	3.794E-12
WNW	1.457E-10	6.989E-11	4.237E-11	3.565E-11	2.512E-11	1.624E-11	1.193E-11	8.965E-12	6.972E-12	5.577E-12	4.552E-12
NW	1.354E-10	6.496E-11	4.018E-11	2.164E-11	2.339E-11	1.767E-11	1.257E-11	8.770E-12	6.840E-12	5.439E-12	4.442E-12
NNW	1.071E-10	5.107E-11	3.151E-11	2.377E-11	2.411E-11	1.482E-11	1.045E-11	7.888E-12	6.138E-12	4.906E-12	4.002E-12
N	1.090E-10	5.266E-11	3.239E-11	1.737E-11	2.427E-11	2.053E-11	1.351E-11	9.541E-12	7.426E-12	5.936E-12	4.848E-12
NNE	2.197E-10	1.043E-10	6.361E-11	3.345E-11	2.139E-11	1.544E-11	1.194E-11	9.687E-12	8.120E-12	6.958E-12	6.095E-12
NE	2.513E-10	1.183E-10	7.318E-11	3.841E-11	2.434E-11	1.740E-11	1.324E-11	1.059E-11	8.756E-12	7.407E-12	6.401E-12
ENE	1.767E-10	8.391E-11	5.184E-11	2.753E-11	1.755E-11	1.274E-11	9.794E-12	7.956E-12	6.641E-12	5.700E-12	4.981E-12
E	1.443E-10	6.879E-11	4.256E-11	2.277E-11	1.453E-11	1.068E-11	8.220E-12	6.528E-12	5.310E-12	4.401E-12	3.703E-12
ESE	1.474E-10	7.026E-11	4.351E-11	2.334E-11	1.493E-11	1.101E-11	8.497E-12	6.767E-12	5.521E-12	4.572E-12	3.865E-12
SE	1.287E-10	6.135E-11	3.799E-11	2.039E-11	1.303E-11	9.594E-12	7.417E-12	5.989E-12	4.905E-12	4.284E-12	3.776E-12
SSE	1.250E-10	5.954E-11	3.689E-11	1.966E-11	1.264E-11	9.098E-12	7.207E-12	9.109E-12	9.610E-12	7.686E-12	6.242E-12

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Fermi COL A

Turbine Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.722E-09	1.279E-09	4.111E-10	2.054E-10	1.227E-10	5.003E-11	1.565E-11	6.972E-12	4.391E-12	3.972E-12
SSW	3.863E-09	1.091E-09	3.605E-10	1.819E-10	1.089E-10	4.457E-11	1.392E-11	6.133E-12	3.738E-12	2.664E-12
SW	5.226E-09	1.517E-09	5.060E-10	2.558E-10	1.533E-10	6.292E-11	1.952E-11	8.504E-12	5.072E-12	3.508E-12
WSW	6.039E-09	1.606E-09	5.037E-10	2.488E-10	1.515E-10	6.200E-11	1.887E-11	8.876E-12	6.802E-12	4.695E-12
W	7.794E-09	2.024E-09	5.960E-10	2.843E-10	1.669E-10	6.697E-11	2.560E-11	1.400E-11	7.537E-12	4.676E-12
WNW	8.717E-09	2.197E-09	6.423E-10	3.086E-10	1.823E-10	7.450E-11	3.246E-11	1.689E-11	9.054E-12	5.611E-12
NW	8.208E-09	2.058E-09	5.930E-10	2.852E-10	1.691E-10	6.960E-11	2.654E-11	1.716E-11	9.122E-12	5.485E-12
NNW	6.683E-09	1.617E-09	4.628E-10	2.226E-10	1.331E-10	5.483E-11	2.564E-11	1.555E-11	7.954E-12	4.936E-12
N	6.429E-09	1.602E-09	4.735E-10	2.299E-10	1.363E-10	5.617E-11	2.378E-11	1.872E-11	9.870E-12	5.975E-12
NNE	1.294E-08	3.194E-09	9.492E-10	4.621E-10	2.754E-10	1.119E-10	3.479E-11	1.563E-11	9.734E-12	6.983E-12
NE	1.193E-08	3.256E-09	1.053E-09	5.268E-10	3.145E-10	1.278E-10	3.988E-11	1.759E-11	1.065E-11	7.434E-12
ENE	7.943E-09	2.229E-09	7.291E-10	3.678E-10	2.207E-10	9.029E-11	2.850E-11	1.284E-11	7.980E-12	5.713E-12
E	6.896E-09	1.883E-09	5.994E-10	3.002E-10	1.801E-10	7.392E-11	2.350E-11	1.072E-11	6.547E-12	4.412E-12
ESE	7.497E-09	1.990E-09	6.186E-10	3.073E-10	1.839E-10	7.552E-11	2.408E-11	1.105E-11	6.787E-12	4.591E-12
SE	6.445E-09	1.722E-09	5.383E-10	2.680E-10	1.605E-10	6.594E-11	2.103E-11	9.641E-12	5.984E-12	4.280E-12
SSE	6.009E-09	1.634E-09	5.210E-10	2.606E-10	1.561E-10	6.402E-11	2.037E-11	9.287E-12	8.756E-12	7.721E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:11

0Fermi COL A

0Turbine Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+				UNDEPLETED	UNDEPLETED	DEPLETED	
	Site Boundary	S	.70	3.5E-07	3.5E-07	3.2E-07	5.5E-09
	Site Boundary	SSW	.72	2.6E-07	2.5E-07	2.3E-07	4.4E-09
	Site Boundary	SW	.90	2.1E-07	2.1E-07	2.0E-07	4.0E-09
	Site Boundary	WSW	.80	2.5E-07	2.5E-07	2.3E-07	5.8E-09
	Site Boundary	W	.59	4.8E-07	4.8E-07	4.4E-07	1.1E-08
	Site Boundary	WNW	.57	5.5E-07	5.5E-07	5.1E-07	1.3E-08
	Site Boundary	NW	.57	5.4E-07	5.4E-07	5.0E-07	1.2E-08
	Site Boundary	NNW	.57	5.2E-07	5.2E-07	4.8E-07	1.0E-08
	Site Boundary	N	.66	4.9E-07	4.9E-07	4.5E-07	8.2E-09
	Site Boundary	NNE	.95	5.1E-07	5.1E-07	4.6E-07	8.2E-09
	Site Boundary	NE	1.28	2.6E-07	2.6E-07	2.3E-07	4.1E-09
	Site Boundary	SSE	.70	3.6E-07	3.6E-07	3.3E-07	7.0E-09
	Residence	SSE	.92	2.2E-07	2.2E-07	2.0E-07	4.3E-09
	Residence	SSW	.90	1.7E-07	1.7E-07	1.6E-07	3.0E-09
	Residence	SW	1.00	1.8E-07	1.8E-07	1.7E-07	3.3E-09
	Residence	WSW	1.13	1.3E-07	1.3E-07	1.2E-07	2.7E-09
	Residence	W	.98	2.1E-07	2.1E-07	1.9E-07	4.8E-09

Residence	NW	.69	4.0E-07	4.0E-07	3.7E-07	9.9E-09
Residence	NW	1.07	1.8E-07	1.8E-07	1.6E-07	4.1E-09
Residence	NNW	1.19	1.4E-07	1.4E-07	1.2E-07	2.4E-09
Residence	NNE	1.32	2.7E-07	2.7E-07	2.4E-07	3.7E-09
Residence	NNE	1.31	2.8E-07	2.8E-07	2.5E-07	3.8E-09
Residence	NE	1.36	2.3E-07	2.3E-07	2.1E-07	3.6E-09
Garden	S	1.28	1.2E-07	1.2E-07	1.1E-07	1.6E-09
Garden	WSW	2.14	4.8E-08	4.8E-08	4.4E-08	6.7E-10
Garden	W	1.50	9.7E-08	9.7E-08	8.7E-08	1.8E-09
Garden	NW	.69	4.0E-07	4.0E-07	3.7E-07	9.8E-09
Garden	NNW	1.09	1.6E-07	1.6E-07	1.4E-07	3.0E-09
Garden	NNW	1.46	9.5E-08	9.4E-08	8.5E-08	1.5E-09
Garden	N	2.31	5.9E-08	5.9E-08	5.3E-08	5.4E-10
Garden	NNE	2.16	1.2E-07	1.2E-07	1.1E-07	1.3E-09
Garden	NE	2.24	1.1E-07	1.1E-07	1.0E-07	1.3E-09
Sheep	NNW	4.46	1.7E-08	1.7E-08	1.5E-08	1.4E-10
Sheep	NNE	4.50	4.1E-08	4.1E-08	3.6E-08	2.7E-10
Goat	WNW	2.30	5.4E-08	5.3E-08	4.8E-08	7.4E-10
Goat	NNW	3.08	2.9E-08	2.9E-08	2.6E-08	2.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

```
00101111000
Fermi COL_B
    9    7    6   15    2    3    0
   10. 101. 2.26   -8.   0.
    0    0    0    0    0    0    0
    0    0    5    3    5    1   10    6    8    7    5    2    3    0    0    0
    6    3   10   24    3    4    4    8    5    7   10   10   22   17   12    4
   29   35   46   42   42   56   63   59   62   68   58  100   97  133  117   53
   53   63  108  102  106  279  363  243  222  199  137  158  188  221  202  137
   72   44  131  145  141  326  422  320  203  300  174  199  146  208  198  149
   72   48   79  129  181  211  124  123   79  256  200  163  122  127  108  115
   12   14   15   39  116   57    7   10    9   68   79   20   42   33   30   37
   12    7    1    7   37    9    0    1    1   11   18    5    3    5    4    8
    0    0    0    0    2    0    0    0    0    2    1    0    0    0    0    0
    0    0    0    1    0    1    1    0    0    2    0    0    0    0    0    0
    3    2    2    1    0    1    1    4    4    3    5    4   15    9    6    1
   30   23   12   18    7   17   32   14   19   25   28   38   38   45   43   36
   35   23   30   19   18   40   75   61   46   50   57   58   78   70   55   61
   34   20   19   28   25   37   51   39   24   82   58   71   51   43   43   42
   20   19   15   28   35   22   21   12   18   70   84   28   36   25   22   32
    7   12    3   12   17   13    4    2    2   30   43   13   11   14    6    9
    6    1    2    4    7    1    0    0    0   10   25    2    1    2    2    0
    0    0    0    0    0    0    0    0    0    0    4    0    0    0    0    0
    0    0    0    0    0    1    0    0    1    2    1    0    0    0    0    0
    2    5    4    4    1    0    1    0    5    7    4   12   14   10    6   12
   27   24   12    6    5   15   14   15   22   29   37   48   48   57   44   27
   42   30   28   11   20   37   46   39   39   50   51   57   52   48   36   60
   29   23   36   29   19   28   34   32   27   56   77   36   48   39   31   41
   30   21   27   42   28   30   14    6   20   74   77   44   26   27   22   13
   10   22    6   14   18   12    5    7    5   35   48   16   16   20    9    8
    6    0    1   10   10    2    1    1    0    8   45    6    0    3    5    2
    0    0    0    2    1    0    0    0    0    0    6    0    0    0    0    0
    1    0    1    1    1    2    6    2    3    8    7    4    4    3    0    0
   48   29   26   12    6   11   11    8   11   31   36   56   77   71   55   42
  122  169   90   51   47   73   55   60   77   74  186  330  260  216  213  189
  144  180  251  131   93  158  162   93  133  194  391  431  290  256  271  290
  133  131  380  240  179  194  173  103  161  256  483  333  216  180  178  223
  222  133  330  324  240  195  102   92  126  392  585  237  160  152  115  128
   99  105   84  123  163   64   23   18   36  171  346   55   38   77   20   48
   31   34    4   43   79   30    9    2    3   76  125   21    6   11    2   15
    4   10    2    4   26    1    1    2    0    1   28    4    0    0    0    0
    2    0    3    3    4    0    2    1    8    9    4    6    5    3    4    2
   65   45   32   17   20   18   21   31   71   77  128  212  193  193  140   74
  167  225   74   48   54   98   83  114  202  239  464  525  306  352  408  258
  166  159  210  132  131  185  164  197  267  507  340  228  142  139  131  211
   92   60  117  126  123  182  150  142  231  452  158   57   47   58   47   59
   56   39   35   67   91   82   87   94  153  423  113   23   13   29   36   23
   13    6    9   13   55   35   11   14   34  121   42    2    3    6    6    8
    7    2    0    3   26   14    2    0    7   21   10    0    2    1    1    3
    1    0    0    3   10    0    0    2    1    3    3    0    1    2    0    0
    2    1    1    1    0    2    2    3    3    2    3    5    4    3    3    5
   48   32   15   10   12   13   13   40   68   99  134  203  221  265  162   93
  149   66   24   14   18   42   42   72  106  177  221  215  122  212  160  144
   98   35   11   10   32   47   66   93   67  141   26    6    7   14   15   47
   13    9    5   12   20   36   37   57   47   98   14    5    9    2    6    5
    8    3    0    8   16   16   22   32   41   81    9    5    1    6    2    6
    1    0    0    2    8    5    7    7   15   14    2    1    0    1    0    0
    0    0    0    0    8    0    1    3    2    4    0    5    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    2    0    0    0
    0    0    0    0    0    0    0    1    0    0    1    2    2    0    2    0
   23   14    5    1    1    7    9    7   21   23   49  128  223  333  151   77
   63   12    5    4   10   27   37   21   17   60   49   81   49  184   87   91
   20   10    2    2   10   27   37   31   18   29   11    2    2    3    1   19
    4    0    0    2   10   18   22   24    9   15    5    0    0    1    1    0
    1    0    0    0    8   13   20   18    5   16    7    5    0    0    0    0
    0    0    0    0    2    1    3    5    0    0    1    1    0    0    0    0
    0    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
 101. 0.75  2.5  4.5  6.5  8.5 11.5 14.5 18.5 23.5
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
804678046780467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
    2    2
Meat  Cow
    8 4904   10 7239
```

```
Milk Cow
    6 3513    7 5869
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

```
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:20

 PRINTOUT OF INPUT CARDS
0    1     00101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL B
     3         9    7    6   15    2    3    0
     4       10.00 101.00   2.26  -8.00    .00
     5        .000   .000   .000   .000   .000   .000   .000
     6        .000   .000  5.000  3.000  5.000  1.000 10.000  6.000  8.000  7.000  5.000  2.000  3.000   .000   .000   .000
     6       6.000  3.000 10.000 24.000  3.000  4.000  4.000  8.000  5.000  7.000 10.000 10.000 22.000 17.000 12.000  4.000
     6      29.000 35.000 46.000 42.000 42.000 56.000 63.000 59.000 62.000 68.000 58.000100.000 97.000133.000117.000 53.000
     6      53.000 63.000108.000102.000106.000279.000363.000243.000222.000199.000137.000158.000188.000221.000202.000137.000
     6      72.000 44.000131.000145.000141.000326.000422.000320.000203.000300.000174.000199.000146.000208.000198.000149.000
     6      72.000 48.000 79.000129.000181.000211.000124.000123.000 79.000256.000200.000163.000122.000127.000108.000115.000
     6      12.000 14.000 15.000 39.000116.000 57.000  7.000 10.000  9.000 68.000 79.000 20.000 42.000 33.000 30.000 37.000
     6      12.000  7.000  1.000  7.000 37.000  9.000   .000  1.000  1.000 11.000 18.000  5.000  3.000  5.000  4.000  8.000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000
     6        .000   .000   .000  1.000   .000  1.000  1.000   .000   .000  2.000   .000   .000   .000   .000   .000   .000
     6       3.000  2.000  2.000  1.000   .000  1.000  1.000  4.000  4.000  3.000  5.000  4.000 15.000  9.000  6.000  1.000
     6      30.000 23.000 12.000 18.000  7.000 17.000 32.000 14.000 19.000 25.000 28.000 38.000 38.000 45.000 43.000 36.000
     6      35.000 23.000 30.000 19.000 18.000 40.000 75.000 61.000 46.000 50.000 57.000 58.000 78.000 70.000 55.000 61.000
     6      34.000 20.000 19.000 28.000 25.000 37.000 51.000 39.000 24.000 82.000 58.000 71.000 51.000 43.000 43.000 42.000
     6      20.000 19.000 15.000 28.000 35.000 22.000 21.000 12.000 18.000 70.000 84.000 28.000 36.000 25.000 22.000 32.000
     6       7.000 12.000  3.000 12.000 17.000 13.000  4.000  2.000  2.000 30.000 43.000 13.000 11.000 14.000  6.000  9.000
     6       6.000  1.000  2.000  4.000  7.000  1.000   .000   .000   .000 10.000 25.000  2.000  1.000  2.000  2.000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  1.000   .000   .000   .000   .000   .000
     6       2.000  5.000  4.000  4.000  1.000   .000  1.000   .000  5.000  7.000  4.000 12.000 14.000 10.000  6.000 12.000
     6      27.000 24.000 12.000  6.000  5.000 15.000 14.000 15.000 22.000 29.000 37.000 48.000 48.000 57.000 44.000 27.000
     6      42.000 30.000 28.000 11.000 20.000 37.000 46.000 39.000 39.000 50.000 51.000 57.000 52.000 48.000 36.000 60.000
     6      29.000 23.000 36.000 29.000 19.000 28.000 34.000 32.000 27.000 56.000 77.000 36.000 48.000 39.000 31.000 41.000
     6      30.000 21.000 27.000 42.000 28.000 30.000 14.000  6.000 20.000 74.000 77.000 44.000 26.000 27.000 22.000 13.000
     6      10.000 22.000  6.000 14.000 18.000 12.000  5.000  7.000  5.000 35.000 48.000 16.000 16.000 20.000  9.000  8.000
     6       6.000   .000  1.000 10.000 10.000  2.000  1.000  1.000   .000  8.000 45.000  6.000   .000  3.000  5.000  2.000
     6        .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000  6.000   .000   .000   .000   .000   .000
     6       1.000   .000  1.000  1.000  1.000  2.000  6.000  2.000  3.000  8.000  7.000  4.000  4.000  3.000   .000   .000
     6      48.000 29.000 26.000 12.000  6.000 11.000 11.000  8.000 11.000 31.000 36.000 56.000 77.000 71.000 55.000 42.000
     6     122.000169.000 90.000 51.000 47.000 73.000 55.000 60.000 77.000 74.000186.000330.000260.000216.000213.000189.000
     6     144.000180.000251.000131.000 93.000158.000162.000 93.000133.000194.000391.000431.000290.000256.000271.000290.000
     6     133.000131.000380.000240.000179.000194.000173.000103.000161.000256.000483.000333.000216.000180.000178.000223.000
     6     222.000133.000330.000324.000240.000195.000102.000 92.000126.000392.000585.000237.000160.000152.000115.000128.000
     6      99.000105.000 84.000123.000163.000 64.000 23.000 18.000 36.000171.000346.000 55.000 38.000 77.000 20.000 48.000
     6      31.000 34.000  4.000 43.000 79.000 30.000  9.000  2.000  3.000 76.000125.000 21.000  6.000 11.000  2.000 15.000
     6       4.000 10.000  2.000  4.000 26.000  1.000  1.000  2.000   .000  1.000 28.000  4.000   .000   .000   .000   .000
     6       2.000   .000  3.000  3.000  4.000   .000  2.000  1.000  8.000  9.000  4.000  6.000  5.000  3.000  4.000  2.000
     6      65.000 45.000 32.000 17.000 20.000 18.000 21.000 31.000 71.000 77.000128.000212.000193.000193.000140.000 74.000
     6     167.000225.000 74.000 48.000 54.000 98.000 83.000114.000202.000239.000464.000525.000306.000352.000408.000258.000
     6     166.000159.000210.000132.000131.000185.000164.000197.000267.000507.000340.000228.000142.000139.000131.000211.000
     6      92.000 60.000117.000126.000123.000182.000150.000142.000231.000452.000158.000 57.000 47.000 58.000 47.000 59.000
     6      56.000 39.000 35.000 67.000 91.000 82.000 87.000 94.000153.000423.000113.000 23.000 13.000 29.000 36.000 23.000
     6      13.000  6.000  9.000 13.000 55.000 35.000 11.000 14.000 34.000121.000 42.000  2.000  3.000  6.000  6.000  8.000
     6       7.000  2.000   .000  3.000 26.000 14.000  2.000   .000  7.000 21.000 10.000   .000  2.000  1.000  1.000  3.000
     6       1.000   .000   .000  3.000 10.000   .000   .000  2.000  1.000  3.000  3.000   .000  1.000  2.000   .000   .000
     6       2.000  1.000  1.000  1.000   .000  2.000  2.000  3.000  3.000  2.000  3.000  5.000  4.000  3.000  3.000  5.000
     6      48.000 32.000 15.000 10.000 12.000 13.000 13.000 40.000 68.000 99.000134.000203.000221.000265.000162.000 93.000
     6     149.000 66.000 24.000 14.000 18.000 42.000 42.000 72.000106.000177.000221.000215.000122.000212.000160.000144.000
     6      98.000 35.000 11.000 10.000 32.000 47.000 66.000 93.000 67.000141.000 26.000  6.000  7.000 14.000 15.000 47.000
     6      13.000  9.000  5.000 12.000 20.000 36.000 37.000 57.000 47.000 98.000 14.000  5.000  9.000  2.000  6.000  5.000
     6       8.000  3.000   .000  8.000 16.000 16.000 22.000 32.000 41.000 81.000  9.000  5.000  1.000  6.000  2.000  6.000
     6       1.000   .000   .000  2.000  8.000  5.000  7.000  7.000 15.000 14.000  2.000  1.000   .000  1.000   .000   .000
     6        .000   .000   .000   .000  8.000   .000  1.000  3.000  2.000  4.000   .000  5.000  1.000   .000   .000   .000
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     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  2.000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  2.000   .000  2.000   .000
     6      23.000 14.000  5.000  1.000  1.000  7.000  9.000  7.000 21.000 23.000 49.000128.000223.000333.000151.000 77.000
     6      63.000 12.000  5.000  4.000 10.000 27.000 37.000 21.000 17.000 60.000 49.000 81.000 49.000184.000 87.000 91.000
     6      20.000 10.000  2.000  2.000 10.000 27.000 37.000 31.000 18.000 29.000 11.000  2.000  2.000  3.000  1.000 19.000
     6       4.000   .000   .000  2.000 10.000 18.000 22.000 24.000  9.000 15.000  5.000   .000   .000  1.000  1.000   .000
     6       1.000   .000   .000   .000  8.000 13.000 20.000 18.000  5.000 16.000  7.000  5.000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000  1.000  3.000  5.000   .000   .000  1.000  1.000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     7        101.   .750  2.500  4.500  6.500  8.500 11.500 14.500 18.500 23.500   .000   .000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
    10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
    10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
    11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
    10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
    11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
    12          2     2
    13     Meat  Cow
    14       8 4904.0 10 7239.0
    13     Milk Cow
    14       6 3513.0  7 5869.0
    15     Ground Level/Radwaste Bldg
    16        .000   .000   10.0     .0  350.0   10.0   .00
    17          0     0     0
    15     Reactor Bldg/Fuel Bldg Stack
    16      17.780  2.400   52.6   48.0     .0   52.6   .00
    17          0     0     0
    15     Turbine Bldg Stack
    16      17.780  1.950   71.3   52.0     .0   71.3   .00
    17          0     0     0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:20

     Fermi COL B

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)       N    NNE     NE    ENE      E    ESE     SE    SSE      S    SSW     SW    WSW      W    WNW     NW    NNW  TOTAL
   .34         .000   .000   .010   .006   .010   .002   .020   .012   .016   .014   .010   .004   .006   .000   .000   .000   .110
  1.12         .012   .006   .020   .048   .006   .008   .008   .016   .010   .014   .020   .020   .044   .034   .024   .008   .298
  2.01         .058   .070   .092   .084   .084   .112   .126   .118   .124   .136   .116   .200   .194   .266   .234   .106  2.117
  2.91         .106   .126   .216   .204   .212   .557   .725   .485   .443   .397   .274   .316   .375   .441   .403   .274  5.554
  3.80         .144   .088   .262   .290   .282   .651   .843   .639   .405   .599   .347   .397   .292   .415   .395   .298  6.347
  5.14         .144   .096   .158   .258   .361   .421   .248   .246   .158   .511   .399   .326   .244   .254   .216   .230  4.268
  6.48         .024   .028   .030   .078   .232   .114   .014   .020   .018   .136   .158   .040   .084   .066   .060   .074  1.174
  8.27         .024   .014   .002   .014   .074   .018   .000   .002   .002   .022   .036   .010   .006   .010   .008   .016   .258
 10.51         .000   .000   .000   .000   .004   .000   .000   .000   .000   .004   .002   .000   .000   .000   .000   .000   .010
 TOTAL         .51    .43    .79    .98   1.26   1.88   1.98   1.54   1.18   1.83   1.36   1.31   1.24   1.49   1.34   1.00  20.14

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS B
0UMAX (M/S)       N    NNE     NE    ENE      E    ESE     SE    SSE      S    SSW     SW    WSW      W    WNW     NW    NNW  TOTAL
   .34         .000   .000   .000   .002   .000   .002   .002   .000   .000   .004   .000   .000   .000   .000   .000   .000   .010
  1.12         .006   .004   .004   .002   .000   .002   .002   .008   .008   .006   .010   .008   .030   .018   .012   .002   .122
  2.01         .060   .046   .024   .036   .014   .034   .064   .028   .038   .050   .056   .076   .076   .090   .086   .072   .849
  2.91         .070   .046   .060   .038   .036   .080   .150   .122   .092   .100   .114   .116   .156   .140   .110   .122  1.550
```

3.80	.068	.040	.038	.056	.050	.074	.102	.078	.048	.164	.116	.142	.102	.086	.086	.084	1.332
5.14	.040	.038	.030	.056	.070	.044	.042	.024	.036	.140	.168	.056	.072	.050	.044	.064	.973
6.48	.014	.024	.006	.024	.034	.026	.008	.004	.004	.060	.086	.026	.022	.028	.012	.018	.395
8.27	.012	.002	.004	.008	.014	.002	.000	.000	.000	.020	.050	.004	.002	.004	.004	.000	.126
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008	.000	.000	.000	.000	.000	.008
TOTAL	.27	.20	.17	.22	.22	.26	.37	.26	.23	.54	.61	.43	.46	.42	.35	.36	5.36

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.002	.000	.000	.000	.000	.000	.010
1.12	.004	.010	.008	.008	.002	.000	.002	.000	.010	.014	.008	.024	.028	.020	.012	.024	.174
2.01	.054	.048	.024	.012	.010	.030	.028	.030	.044	.058	.074	.096	.096	.114	.088	.054	.859
2.91	.084	.060	.056	.022	.040	.074	.092	.078	.078	.100	.102	.114	.104	.096	.072	.120	1.290
3.80	.058	.046	.072	.058	.038	.056	.068	.064	.054	.112	.154	.072	.096	.078	.062	.082	1.168
5.14	.060	.042	.054	.084	.056	.060	.028	.012	.040	.148	.154	.088	.052	.054	.044	.026	1.001
6.48	.020	.044	.012	.028	.036	.024	.010	.014	.010	.070	.096	.032	.032	.040	.018	.016	.501
8.27	.012	.000	.002	.020	.020	.004	.002	.002	.000	.016	.090	.012	.000	.006	.010	.004	.200
10.51	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.012	.000	.000	.000	.000	.000	.018
TOTAL	.29	.25	.23	.24	.20	.25	.23	.20	.24	.52	.69	.44	.41	.41	.31	.33	5.22

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.002	.000	.002	.002	.002	.004	.012	.004	.006	.016	.014	.008	.008	.006	.000	.000	.086
1.12	.096	.058	.052	.024	.012	.022	.022	.016	.022	.062	.072	.112	.154	.142	.110	.084	1.058
2.01	.244	.338	.180	.102	.094	.146	.110	.120	.154	.148	.371	.659	.519	.431	.425	.377	4.418
2.91	.288	.359	.501	.262	.186	.316	.324	.186	.266	.387	.781	.861	.579	.511	.541	.579	6.926
3.80	.266	.262	.759	.479	.357	.387	.346	.206	.322	.511	.965	.665	.431	.359	.355	.445	7.116
5.14	.443	.266	.659	.647	.479	.389	.204	.184	.252	.783	1.168	.473	.320	.304	.230	.256	7.056
6.48	.198	.210	.168	.246	.326	.128	.046	.036	.072	.342	.691	.110	.076	.154	.040	.096	2.936
8.27	.062	.068	.008	.086	.158	.060	.018	.004	.006	.152	.250	.042	.012	.022	.004	.030	.981
10.51	.008	.020	.004	.008	.052	.002	.002	.004	.000	.002	.056	.008	.000	.000	.000	.000	.166
TOTAL	1.61	1.58	2.33	1.86	1.67	1.45	1.08	.76	1.10	2.40	4.37	2.94	2.10	1.93	1.71	1.87	30.74

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.000	.006	.006	.008	.000	.004	.002	.016	.018	.008	.012	.010	.006	.008	.004	.112
1.12	.130	.090	.064	.034	.040	.036	.042	.062	.142	.154	.256	.423	.385	.385	.280	.148	2.670
2.01	.334	.449	.148	.096	.108	.196	.166	.228	.403	.477	.927	1.048	.611	.703	.815	.515	7.224
2.91	.332	.318	.419	.264	.262	.369	.328	.393	.533	1.013	.679	.455	.284	.278	.262	.421	6.608
3.80	.184	.120	.234	.252	.246	.363	.300	.284	.461	.903	.316	.114	.094	.116	.094	.118	4.196
5.14	.112	.078	.070	.134	.182	.164	.174	.188	.306	.845	.226	.046	.026	.058	.072	.046	2.724
6.48	.026	.012	.018	.026	.110	.070	.022	.028	.068	.242	.084	.004	.006	.012	.012	.016	.755
8.27	.014	.004	.000	.006	.052	.028	.004	.000	.014	.042	.020	.000	.004	.002	.002	.006	.198
10.51	.002	.000	.000	.006	.020	.000	.000	.004	.002	.006	.006	.000	.002	.004	.000	.000	.052
TOTAL	1.14	1.07	.96	.82	1.03	1.23	1.04	1.19	1.95	3.70	2.52	2.10	1.42	1.56	1.54	1.27	24.54

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.002	.002	.002	.000	.004	.004	.006	.006	.004	.006	.010	.008	.006	.006	.010	.080
1.12	.096	.064	.030	.020	.024	.026	.026	.080	.136	.198	.268	.405	.441	.529	.324	.186	2.852
2.01	.298	.132	.048	.028	.036	.084	.084	.144	.212	.353	.441	.429	.244	.423	.320	.288	3.563
2.91	.196	.070	.022	.020	.064	.094	.132	.186	.134	.282	.052	.012	.014	.028	.030	.094	1.428
3.80	.026	.018	.010	.024	.040	.072	.074	.114	.094	.196	.028	.010	.018	.004	.012	.010	.749
5.14	.016	.006	.000	.016	.032	.032	.044	.064	.082	.162	.018	.010	.002	.012	.004	.012	.511
6.48	.002	.000	.000	.004	.016	.010	.014	.014	.030	.028	.004	.002	.000	.002	.000	.000	.126
8.27	.000	.000	.000	.000	.016	.000	.002	.006	.004	.008	.000	.010	.002	.000	.000	.000	.048
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.004	.000	.000	.000	.010
TOTAL	.64	.29	.11	.11	.23	.32	.38	.61	.70	1.23	.82	.89	.73	1.00	.69	.60	9.37

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL

.34	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.004	.000	.004	.000	.016
1.12	.046	.028	.010	.002	.002	.014	.018	.014	.042	.046	.098	.256	.445	.665	.302	.154	2.141
2.01	.126	.024	.010	.008	.020	.054	.074	.042	.034	.120	.098	.162	.098	.367	.174	.182	1.592
2.91	.040	.020	.004	.004	.020	.054	.074	.062	.036	.058	.022	.004	.004	.006	.002	.038	.447
3.80	.008	.000	.000	.004	.020	.036	.044	.048	.018	.030	.010	.000	.000	.002	.002	.000	.222
5.14	.002	.000	.000	.000	.016	.026	.040	.036	.010	.032	.014	.010	.000	.000	.000	.000	.186
6.48	.000	.000	.000	.000	.004	.002	.006	.010	.000	.000	.002	.002	.000	.000	.000	.000	.026
8.27	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
10.51	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
TOTAL	.22	.07	.02	.02	.08	.19	.26	.21	.14	.29	.25	.44	.55	1.04	.48	.37	4.63

TOTAL HOURS CONSIDERED ARE 50072
0WIND MEASURED AT 10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.7	3.9	4.6	4.2	4.7	5.6	5.3	4.8	5.5	10.5	10.6	8.5	6.9	7.8	6.4	5.8	100.0

0OVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.335	1.118	2.012	2.906	3.800	5.141	6.482	8.270	10.505
AVE WIND SPEED (M/S):	.168	.726	1.565	2.459	3.353	4.470	5.812	7.376	9.388
WIND SPEED FREQUENCY:	.42	9.31	20.62	23.80	21.13	16.72	5.91	1.81	.27

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSESS IS .447
0DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.212E-05	1.224E-05	5.968E-06	2.845E-06	1.070E-06	5.615E-07	3.493E-07	2.408E-07	1.777E-07	1.377E-07	1.106E-07
SSW	2.990E-05	8.693E-06	4.257E-06	2.027E-06	7.586E-07	3.959E-07	2.451E-07	1.682E-07	1.237E-07	9.553E-08	7.650E-08
SW	2.490E-05	7.149E-06	3.497E-06	1.661E-06	6.193E-07	3.216E-07	1.982E-07	1.355E-07	9.926E-08	7.638E-08	6.096E-08
WSW	1.860E-05	5.285E-06	2.573E-06	1.220E-06	4.547E-07	2.362E-07	1.456E-07	9.955E-08	7.295E-08	5.616E-08	4.484E-08
W	2.015E-05	5.745E-06	2.796E-06	1.328E-06	4.974E-07	2.597E-07	1.608E-07	1.104E-07	8.116E-08	6.266E-08	5.018E-08
WNW	2.792E-05	7.916E-06	3.832E-06	1.820E-06	6.839E-07	3.582E-07	2.225E-07	1.532E-07	1.130E-07	8.746E-08	7.020E-08
NW	2.942E-05	8.268E-06	3.981E-06	1.889E-06	7.115E-07	3.736E-07	2.326E-07	1.605E-07	1.185E-07	9.191E-08	7.388E-08
NNW	3.201E-05	9.137E-06	4.425E-06	2.105E-06	7.945E-07	4.181E-07	2.607E-07	1.802E-07	1.333E-07	1.035E-07	8.324E-08
N	4.464E-05	1.291E-05	6.302E-06	3.000E-06	1.130E-06	5.929E-07	3.689E-07	2.544E-07	1.879E-07	1.456E-07	1.170E-07
NNE	7.320E-05	2.121E-05	1.036E-05	4.931E-06	1.854E-06	9.724E-07	6.046E-07	4.166E-07	3.074E-07	2.381E-07	1.912E-07
NE	8.036E-05	2.333E-05	1.140E-05	5.430E-06	2.038E-06	1.067E-06	6.621E-07	4.555E-07	3.356E-07	2.596E-07	2.082E-07
ENE	9.779E-05	2.840E-05	1.384E-05	6.605E-06	2.491E-06	1.309E-06	8.159E-07	5.633E-07	4.164E-07	3.230E-07	2.597E-07

E	9.458E-05	2.735E-05	1.326E-05	6.333E-06	2.396E-06	1.264E-06	7.898E-07	5.468E-07	4.051E-07	3.150E-07	2.538E-07
ESE	1.214E-04	3.511E-05	1.698E-05	8.117E-06	3.083E-06	1.632E-06	1.024E-06	7.107E-07	5.279E-07	4.113E-07	3.321E-07
SE	7.993E-05	2.313E-05	1.123E-05	5.359E-06	2.028E-06	1.069E-06	6.683E-07	4.627E-07	3.428E-07	2.665E-07	2.147E-07
SSE	5.915E-05	1.711E-05	8.318E-06	3.968E-06	1.497E-06	7.872E-07	4.908E-07	3.391E-07	2.507E-07	1.946E-07	1.566E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.136E-08	4.677E-08	3.031E-08	1.743E-08	1.184E-08	8.802E-09	6.917E-09	5.648E-09	4.742E-09	4.067E-09	3.546E-09
SSW	6.301E-08	3.189E-08	2.049E-08	1.164E-08	7.844E-09	5.790E-09	4.525E-09	3.677E-09	3.075E-09	2.627E-09	2.284E-09
SW	5.007E-08	2.505E-08	1.595E-08	8.949E-09	5.975E-09	4.379E-09	3.403E-09	2.752E-09	2.292E-09	1.951E-09	1.691E-09
WSW	3.685E-08	1.849E-08	1.180E-08	6.646E-09	4.452E-09	3.271E-09	2.547E-09	2.064E-09	1.722E-09	1.468E-09	1.274E-09
W	4.134E-08	2.093E-08	1.345E-08	7.650E-09	5.158E-09	3.809E-09	2.979E-09	2.422E-09	2.027E-09	1.733E-09	1.507E-09
WNW	5.795E-08	2.962E-08	1.917E-08	1.102E-08	7.488E-09	5.565E-09	4.375E-09	3.574E-09	3.002E-09	2.575E-09	2.247E-09
NW	6.109E-08	3.143E-08	2.045E-08	1.183E-08	8.083E-09	6.032E-09	4.757E-09	3.897E-09	3.281E-09	2.822E-09	2.466E-09
NNW	6.888E-08	3.550E-08	2.312E-08	1.339E-08	9.147E-09	6.824E-09	5.380E-09	4.405E-09	3.707E-09	3.186E-09	2.784E-09
N	9.663E-08	4.948E-08	3.206E-08	1.844E-08	1.252E-08	9.303E-09	7.307E-09	5.964E-09	5.006E-09	4.292E-09	3.741E-09
NNE	1.579E-07	8.075E-08	5.228E-08	3.002E-08	2.038E-08	1.513E-08	1.188E-08	9.690E-09	8.130E-09	6.968E-09	6.072E-09
NE	1.718E-07	8.745E-08	5.643E-08	3.226E-08	2.183E-08	1.617E-08	1.267E-08	1.032E-08	8.649E-09	7.404E-09	6.446E-09
ENE	2.147E-07	1.103E-07	7.165E-08	4.135E-08	2.817E-08	2.097E-08	1.650E-08	1.349E-08	1.134E-08	9.734E-09	8.496E-09
E	2.102E-07	1.088E-07	7.111E-08	4.140E-08	2.838E-08	2.123E-08	1.678E-08	1.376E-08	1.161E-08	9.990E-09	8.740E-09
ESE	2.756E-07	1.437E-07	9.437E-08	5.533E-08	3.811E-08	2.862E-08	2.269E-08	1.866E-08	1.577E-08	1.360E-08	1.192E-08
SE	1.778E-07	9.200E-08	6.009E-08	3.495E-08	2.394E-08	1.790E-08	1.414E-08	1.159E-08	9.770E-09	8.407E-09	7.352E-09
SSE	1.295E-07	6.668E-08	4.340E-08	2.512E-08	1.715E-08	1.279E-08	1.008E-08	8.257E-09	6.949E-09	5.972E-09	5.218E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.973E-06	1.239E-06	3.625E-07	1.805E-07	1.115E-07	4.936E-08	1.781E-08	8.859E-09	5.665E-09	4.074E-09
SSW	4.251E-06	8.791E-07	2.546E-07	1.257E-07	7.714E-08	3.374E-08	1.192E-08	5.832E-09	3.690E-09	2.633E-09
SW	3.493E-06	7.185E-07	2.060E-07	1.009E-07	6.150E-08	2.657E-08	9.183E-09	4.414E-09	2.763E-09	1.956E-09
WSW	2.574E-06	5.276E-07	1.513E-07	7.415E-08	4.523E-08	1.960E-08	6.817E-09	3.296E-09	2.072E-09	1.471E-09
W	2.799E-06	5.763E-07	1.670E-07	8.246E-08	5.060E-08	2.214E-08	7.832E-09	3.837E-09	2.431E-09	1.736E-09
WNW	3.845E-06	7.916E-07	2.310E-07	1.148E-07	7.078E-08	3.127E-08	1.126E-08	5.602E-09	3.585E-09	2.580E-09
NW	4.004E-06	8.230E-07	2.413E-07	1.204E-07	7.448E-08	3.314E-08	1.208E-08	6.069E-09	3.908E-09	2.826E-09
NNW	4.441E-06	9.184E-07	2.705E-07	1.353E-07	8.391E-08	3.741E-08	1.367E-08	6.866E-09	4.418E-09	3.192E-09
N	6.304E-06	1.307E-06	3.828E-07	1.908E-07	1.179E-07	5.221E-08	1.884E-08	9.364E-09	5.983E-09	4.299E-09
NNE	1.036E-05	2.146E-06	6.275E-07	3.122E-07	1.928E-07	8.524E-08	3.068E-08	1.523E-08	9.720E-09	6.980E-09
NE	1.140E-05	2.360E-06	6.874E-07	3.409E-07	2.100E-07	9.240E-08	3.300E-08	1.628E-08	1.036E-08	7.418E-09
ENE	1.386E-05	2.880E-06	8.465E-07	4.228E-07	2.618E-07	1.163E-07	4.223E-08	2.110E-08	1.353E-08	9.751E-09
E	1.331E-05	2.767E-06	8.189E-07	4.112E-07	2.558E-07	1.146E-07	4.221E-08	2.135E-08	1.380E-08	1.001E-08
ESE	1.707E-05	3.557E-06	1.061E-06	5.357E-07	3.347E-07	1.511E-07	5.635E-08	2.878E-08	1.871E-08	1.362E-08
SE	1.126E-05	2.342E-06	6.930E-07	3.480E-07	2.164E-07	9.689E-08	3.564E-08	1.800E-08	1.162E-08	8.420E-09
SSE	8.339E-06	1.730E-06	5.092E-07	2.546E-07	1.578E-07	7.029E-08	2.564E-08	1.287E-08	8.281E-09	5.982E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.206E-05	1.220E-05	5.945E-06	2.830E-06	1.062E-06	5.556E-07	3.447E-07	2.370E-07	1.745E-07	1.348E-07	1.080E-07
SSW	2.987E-05	8.673E-06	4.243E-06	2.017E-06	7.534E-07	3.923E-07	2.423E-07	1.659E-07	1.217E-07	9.378E-08	7.492E-08
SW	2.487E-05	7.132E-06	3.484E-06	1.653E-06	6.147E-07	3.184E-07	1.957E-07	1.335E-07	9.752E-08	7.485E-08	5.960E-08
WSW	1.858E-05	5.271E-06	2.563E-06	1.214E-06	4.512E-07	2.338E-07	1.437E-07	9.803E-08	7.165E-08	5.501E-08	4.382E-08
W	2.013E-05	5.732E-06	2.786E-06	1.322E-06	4.940E-07	2.573E-07	1.589E-07	1.088E-07	7.986E-08	6.152E-08	4.915E-08
WNW	2.789E-05	7.899E-06	3.820E-06	1.812E-06	6.794E-07	3.551E-07	2.201E-07	1.512E-07	1.113E-07	8.595E-08	6.884E-08
NW	2.938E-05	8.244E-06	3.964E-06	1.878E-06	7.055E-07	3.694E-07	2.293E-07	1.578E-07	1.162E-07	8.989E-08	7.206E-08
NNW	3.196E-05	9.110E-06	4.406E-06	2.093E-06	7.877E-07	4.133E-07	2.570E-07	1.771E-07	1.306E-07	1.011E-07	8.111E-08
N	4.457E-05	1.287E-05	6.271E-06	2.981E-06	1.119E-06	5.852E-07	3.630E-07	2.495E-07	1.836E-07	1.419E-07	1.136E-07
NNE	7.310E-05	2.116E-05	1.032E-05	4.904E-06	1.839E-06	9.618E-07	5.964E-07	4.099E-07	3.017E-07	2.330E-07	1.866E-07
NE	8.025E-05	2.326E-05	1.135E-05	5.399E-06	2.021E-06	1.054E-06	6.525E-07	4.476E-07	3.289E-07	2.536E-07	2.028E-07
ENE	9.763E-05	2.830E-05	1.377E-05	6.560E-06	2.465E-06	1.291E-06	8.019E-07	5.518E-07	4.064E-07	3.142E-07	2.517E-07
E	9.441E-05	2.725E-05	1.319E-05	6.285E-06	2.369E-06	1.245E-06	7.750E-07	5.345E-07	3.945E-07	3.056E-07	2.453E-07
ESE	1.212E-04	3.499E-05	1.689E-05	8.063E-06	3.052E-06	1.610E-06	1.006E-06	6.964E-07	5.156E-07	4.004E-07	3.222E-07
SE	7.980E-05	2.305E-05	1.117E-05	5.323E-06	2.007E-06	1.055E-06	6.570E-07	4.532E-07	3.346E-07	2.592E-07	2.081E-07
SSE	5.906E-05	1.706E-05	8.280E-06	3.944E-06	1.483E-06	7.777E-07	4.834E-07	3.329E-07	2.454E-07	1.899E-07	1.523E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.898E-08	4.496E-08	2.876E-08	1.613E-08	1.069E-08	7.754E-09	5.949E-09	4.745E-09	3.893E-09	3.264E-09	2.783E-09
SSW	6.157E-08	3.080E-08	1.956E-08	1.085E-08	7.146E-09	5.154E-09	3.937E-09	3.128E-09	2.558E-09	2.138E-09	1.818E-09
SW	4.882E-08	2.411E-08	1.517E-08	8.300E-09	5.411E-09	3.875E-09	2.944E-09	2.330E-09	1.899E-09	1.583E-09	1.344E-09
WSW	3.592E-08	1.779E-08	1.122E-08	6.165E-09	4.034E-09	2.899E-09	2.210E-09	1.755E-09	1.435E-09	1.201E-09	1.023E-09
W	4.040E-08	2.023E-08	1.286E-08	7.160E-09	4.731E-09	3.427E-09	2.631E-09	2.101E-09	1.728E-09	1.453E-09	1.243E-09
WNW	5.671E-08	2.868E-08	1.837E-08	1.035E-08	6.897E-09	5.030E-09	3.882E-09	3.115E-09	2.571E-09	2.168E-09	1.860E-09
NW	5.943E-08	3.018E-08	1.939E-08	1.095E-08	7.312E-09	5.339E-09	4.123E-09	3.311E-09	2.734E-09	2.307E-09	1.980E-09
NNW	6.692E-08	3.401E-08	2.185E-08	1.232E-08	8.207E-09	5.976E-09	4.602E-09	3.685E-09	3.034E-09	2.553E-09	2.186E-09
N	9.356E-08	4.717E-08	3.010E-08	1.681E-08	1.110E-08	8.020E-09	6.136E-09	4.882E-09	3.997E-09	3.345E-09	2.848E-09
NNE	1.537E-07	7.761E-08	4.961E-08	2.780E-08	1.843E-08	1.337E-08	1.027E-08	8.200E-09	6.737E-09	5.656E-09	4.831E-09
NE	1.668E-07	8.371E-08	5.325E-08	2.959E-08	1.948E-08	1.404E-08	1.071E-08	8.502E-09	6.944E-09	5.797E-09	4.923E-09
ENE	2.074E-07	1.047E-07	6.687E-08	3.731E-08	2.459E-08	1.772E-08	1.351E-08	1.070E-08	8.720E-09	7.261E-09	6.149E-09
E	2.024E-07	1.028E-07	6.595E-08	3.700E-08	2.446E-08	1.765E-08	1.346E-08	1.067E-08	8.689E-09	7.228E-09	6.113E-09
ESE	2.665E-07	1.366E-07	8.822E-08	5.002E-08	3.333E-08	2.422E-08	1.859E-08	1.480E-08	1.211E-08	1.012E-08	8.587E-09
SE	1.718E-07	8.736E-08	5.609E-08	3.154E-08	2.089E-08	1.511E-08	1.156E-08	9.180E-09	7.496E-09	6.252E-09	5.302E-09
SSE	1.256E-07	6.368E-08	4.082E-08	2.293E-08	1.521E-08	1.102E-08	8.444E-09	6.723E-09	5.505E-09	4.604E-09	3.916E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.951E-06	1.230E-06	3.579E-07	1.772E-07	1.089E-07	4.754E-08	1.652E-08	7.815E-09	4.765E-09	3.272E-09
SSW	4.238E-06	8.738E-07	2.517E-07	1.237E-07	7.556E-08	3.264E-08	1.114E-08	5.199E-09	3.142E-09	2.144E-09
SW	3.481E-06	7.138E-07	2.036E-07	9.916E-08	6.013E-08	2.563E-08	8.542E-09	3.912E-09	2.341E-09	1.588E-09
WSW	2.565E-06	5.240E-07	1.495E-07	7.285E-08	4.421E-08	1.890E-08	6.340E-09	2.926E-09	1.763E-09	1.204E-09
W	2.790E-06	5.727E-07	1.651E-07	8.115E-08	4.957E-08	2.143E-08	7.347E-09	3.456E-09	2.110E-09	1.457E-09
WNW	3.834E-06	7.869E-07	2.286E-07	1.130E-07	6.942E-08	3.033E-08	1.060E-08	5.069E-09	3.127E-09	2.174E-09
NW	3.988E-06	8.167E-07	2.381E-07	1.181E-07	7.267E-08	3.188E-08	1.121E-08	5.379E-09	3.323E-09	2.313E-09
NNW	4.424E-06	9.113E-07	2.667E-07	1.326E-07	8.178E-08	3.592E-08	1.261E-08	6.021E-09	3.699E-09	2.560E-09
N	6.276E-06	1.295E-06	3.769E-07	1.865E-07	1.146E-07	4.989E-08	1.722E-08	8.087E-09	4.903E-09	3.354E-09
NNE	1.032E-05	2.130E-06	6.193E-07	3.065E-07	1.882E-07	8.208E-08	2.848E-08	1.348E-08	8.234E-09	5.671E-09
NE	1.135E-05	2.342E-06	6.778E-07	3.341E-07	2.046E-07	8.864E-08	3.035E-08	1.416E-08	8.540E-09	5.813E-09
ENE	1.380E-05	2.853E-06	8.324E-07	4.128E-07	2.538E-07	1.107E-07	3.823E-08	1.786E-08	1.075E-08	7.281E-09
E	1.325E-05	2.740E-06	8.041E-07	4.006E-07	2.473E-07	1.086E-07	3.786E-08	1.779E-08	1.071E-08	7.248E-09
ESE	1.699E-05	3.525E-06	1.043E-06	5.234E-07	3.247E-07	1.440E-07	5.109E-08	2.440E-08	1.486E-08	1.014E-08
SE	1.121E-05	2.321E-06	6.816E-07	3.398E-07	2.098E-07	9.222E-08	3.226E-08	1.523E-08	9.218E-09	6.269E-09
SSE	8.305E-06	1.716E-06	5.017E-07	2.493E-07	1.535E-07	6.728E-08	2.347E-08	1.111E-08	6.751E-09	4.616E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.985E-05	1.116E-05	5.313E-06	2.487E-06	9.071E-07	4.636E-07	2.819E-07	1.904E-07	1.379E-07	1.051E-07	8.306E-08
SSW	2.829E-05	7.933E-06	3.790E-06	1.772E-06	6.430E-07	3.270E-07	1.979E-07	1.331E-07	9.610E-08	7.295E-08	5.750E-08
SW	2.355E-05	6.524E-06	3.113E-06	1.452E-06	5.249E-07	2.656E-07	1.600E-07	1.072E-07	7.706E-08	5.829E-08	4.579E-08
WSW	1.760E-05	4.822E-06	2.290E-06	1.066E-06	3.853E-07	1.950E-07	1.175E-07	7.873E-08	5.663E-08	4.285E-08	3.368E-08
W	1.907E-05	5.243E-06	2.489E-06	1.161E-06	4.216E-07	2.144E-07	1.298E-07	8.732E-08	6.303E-08	4.785E-08	3.771E-08
WNW	2.641E-05	7.225E-06	3.412E-06	1.591E-06	5.798E-07	2.959E-07	1.797E-07	1.213E-07	8.778E-08	6.681E-08	5.278E-08
NW	2.783E-05	7.544E-06	3.543E-06	1.651E-06	6.028E-07	3.084E-07	1.876E-07	1.268E-07	9.197E-08	7.010E-08	5.546E-08
NNW	3.028E-05	8.337E-06	3.939E-06	1.840E-06	6.731E-07	3.450E-07	2.103E-07	1.424E-07	1.034E-07	7.889E-08	6.247E-08
N	4.223E-05	1.178E-05	5.608E-06	2.621E-06	9.566E-07	4.891E-07	2.975E-07	2.010E-07	1.456E-07	1.109E-07	8.769E-08
NNE	6.925E-05	1.936E-05	9.220E-06	4.310E-06	1.571E-06	8.027E-07	4.878E-07	3.294E-07	2.386E-07	1.817E-07	1.436E-07
NE	7.602E-05	2.128E-05	1.015E-05	4.745E-06	1.727E-06	8.804E-07	5.341E-07	3.600E-07	2.604E-07	1.980E-07	1.563E-07
ENE	9.251E-05	2.591E-05	1.232E-05	5.770E-06	2.109E-06	1.080E-06	6.577E-07	4.448E-07	3.227E-07	2.460E-07	1.946E-07
E	8.947E-05	2.495E-05	1.180E-05	5.532E-06	2.028E-06	1.042E-06	6.363E-07	4.315E-07	3.137E-07	2.397E-07	1.900E-07
ESE	1.149E-04	3.203E-05	1.511E-05	7.092E-06	2.611E-06	1.346E-06	8.251E-07	5.612E-07	4.092E-07	3.134E-07	2.490E-07
SE	7.561E-05	2.110E-05	9.990E-06	4.682E-06	1.717E-06	8.820E-07	5.387E-07	3.653E-07	2.656E-07	2.029E-07	1.609E-07
SSE	5.596E-05	1.562E-05	7.403E-06	3.467E-06	1.268E-06	6.496E-07	3.959E-07	2.679E-07	1.945E-07	1.483E-07	1.174E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.759E-08	3.260E-08	2.006E-08	1.060E-08	6.713E-09	4.692E-09	3.488E-09	2.707E-09	2.167E-09	1.777E-09	1.485E-09
SSW	4.666E-08	2.226E-08	1.358E-08	7.095E-09	4.459E-09	3.097E-09	2.292E-09	1.771E-09	1.412E-09	1.154E-09	9.618E-10
SW	3.705E-08	1.746E-08	1.056E-08	5.442E-09	3.387E-09	2.334E-09	1.716E-09	1.319E-09	1.047E-09	8.522E-10	7.074E-10
WSW	2.727E-08	1.289E-08	7.811E-09	4.040E-09	2.522E-09	1.743E-09	1.284E-09	9.890E-10	7.866E-10	6.414E-10	5.332E-10
W	3.061E-08	1.461E-08	8.919E-09	4.664E-09	2.934E-09	2.040E-09	1.511E-09	1.169E-09	9.337E-10	7.642E-10	6.375E-10
WNW	4.293E-08	2.069E-08	1.272E-08	6.726E-09	4.267E-09	2.987E-09	2.225E-09	1.730E-09	1.387E-09	1.140E-09	9.539E-10
NW	4.518E-08	2.190E-08	1.352E-08	7.190E-09	4.578E-09	3.214E-09	2.399E-09	1.868E-09	1.500E-09	1.234E-09	1.034E-09
NNW	5.092E-08	2.472E-08	1.528E-08	8.123E-09	5.169E-09	3.624E-09	2.702E-09	2.102E-09	1.686E-09	1.385E-09	1.159E-09
N	7.136E-08	3.440E-08	2.115E-08	1.115E-08	7.052E-09	4.919E-09	3.651E-09	2.828E-09	2.261E-09	1.851E-09	1.544E-09

NNE	1.168E-07	5.627E-08	3.459E-08	1.825E-08	1.155E-08	8.064E-09	5.991E-09	4.646E-09	3.718E-09	3.047E-09	2.545E-09
NE	1.270E-07	6.088E-08	3.728E-08	1.956E-08	1.233E-08	8.578E-09	6.354E-09	4.914E-09	3.922E-09	3.207E-09	2.672E-09
ENE	1.585E-07	7.661E-08	4.719E-08	2.496E-08	1.581E-08	1.104E-08	8.199E-09	6.354E-09	5.080E-09	4.159E-09	3.469E-09
E	1.550E-07	7.549E-08	4.675E-08	2.492E-08	1.587E-08	1.113E-08	8.294E-09	6.445E-09	5.164E-09	4.236E-09	3.539E-09
ESE	2.035E-07	9.985E-08	6.219E-08	3.343E-08	2.142E-08	1.510E-08	1.130E-08	8.812E-09	7.084E-09	5.828E-09	4.883E-09
SE	1.312E-07	6.390E-08	3.958E-08	2.110E-08	1.344E-08	9.425E-09	7.026E-09	5.462E-09	4.378E-09	3.593E-09	3.003E-09
SSE	9.570E-08	4.639E-08	2.865E-08	1.521E-08	9.670E-09	6.774E-09	5.046E-09	3.921E-09	3.142E-09	2.578E-09	2.155E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.357E-06	1.061E-06	2.937E-07	1.404E-07	8.385E-08	3.480E-08	1.097E-08	4.749E-09	2.725E-09	1.784E-09
SSW	3.814E-06	7.533E-07	2.064E-07	9.786E-08	5.806E-08	2.383E-08	7.366E-09	3.138E-09	1.783E-09	1.160E-09
SW	3.133E-06	6.157E-07	1.670E-07	7.851E-08	4.626E-08	1.875E-08	5.666E-09	2.368E-09	1.329E-09	8.563E-10
WSW	2.309E-06	4.520E-07	1.226E-07	5.770E-08	3.402E-08	1.383E-08	4.204E-09	1.767E-09	9.963E-10	6.443E-10
W	2.511E-06	4.938E-07	1.354E-07	6.419E-08	3.809E-08	1.564E-08	4.841E-09	2.067E-09	1.177E-09	7.675E-10
WNW	3.450E-06	6.783E-07	1.873E-07	8.935E-08	5.329E-08	2.209E-08	6.965E-09	3.023E-09	1.741E-09	1.144E-09
NW	3.591E-06	7.048E-07	1.955E-07	9.360E-08	5.599E-08	2.335E-08	7.437E-09	3.252E-09	1.880E-09	1.239E-09
NNW	3.983E-06	7.865E-07	2.191E-07	1.052E-07	6.306E-08	2.634E-08	8.400E-09	3.667E-09	2.115E-09	1.390E-09
N	5.653E-06	1.119E-06	3.100E-07	1.482E-07	8.853E-08	3.672E-08	1.155E-08	4.981E-09	2.847E-09	1.859E-09
NNE	9.290E-06	1.838E-06	5.084E-07	2.428E-07	1.449E-07	6.009E-08	1.890E-08	8.164E-09	4.677E-09	3.060E-09
NE	1.022E-05	2.021E-06	5.568E-07	2.651E-07	1.578E-07	6.508E-08	2.028E-08	8.688E-09	4.948E-09	3.221E-09
ENE	1.243E-05	2.465E-06	6.852E-07	3.284E-07	1.965E-07	8.173E-08	2.583E-08	1.117E-08	6.396E-09	4.176E-09
E	1.194E-05	2.368E-06	6.625E-07	3.192E-07	1.918E-07	8.039E-08	2.575E-08	1.126E-08	6.485E-09	4.253E-09
ESE	1.531E-05	3.045E-06	8.586E-07	4.161E-07	2.512E-07	1.061E-07	3.448E-08	1.526E-08	8.864E-09	5.850E-09
SE	1.010E-05	2.005E-06	5.609E-07	2.702E-07	1.624E-07	6.806E-08	2.180E-08	9.535E-09	5.496E-09	3.607E-09
SSE	7.479E-06	1.482E-06	4.124E-07	1.979E-07	1.185E-07	4.946E-08	1.573E-08	6.855E-09	3.946E-09	2.589E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.082E-07	3.660E-08	1.879E-08	8.934E-09	3.209E-09	1.591E-09	9.371E-10	6.136E-10	4.318E-10	3.200E-10	2.466E-10
SSW	9.010E-08	3.047E-08	1.564E-08	7.437E-09	2.672E-09	1.325E-09	7.801E-10	5.108E-10	3.594E-10	2.664E-10	2.053E-10
SW	1.068E-07	3.610E-08	1.854E-08	8.812E-09	3.165E-09	1.570E-09	9.243E-10	6.052E-10	4.259E-10	3.156E-10	2.432E-10
WSW	9.838E-08	3.327E-08	1.708E-08	8.121E-09	2.917E-09	1.447E-09	8.518E-10	5.578E-10	3.925E-10	2.909E-10	2.241E-10
W	1.086E-07	3.673E-08	1.886E-08	8.965E-09	3.220E-09	1.597E-09	9.403E-10	6.157E-10	4.332E-10	3.211E-10	2.474E-10
WNW	1.294E-07	4.375E-08	2.246E-08	1.068E-08	3.836E-09	1.902E-09	1.120E-09	7.334E-10	5.161E-10	3.825E-10	2.947E-10
NW	1.236E-07	4.181E-08	2.147E-08	1.021E-08	3.666E-09	1.818E-09	1.070E-09	7.009E-10	4.932E-10	3.655E-10	2.817E-10

NNW	1.106E-07	3.740E-08	1.920E-08	9.129E-09	3.279E-09	1.626E-09	9.575E-10	6.270E-10	4.412E-10	3.269E-10	2.520E-10
N	1.278E-07	4.323E-08	2.220E-08	1.055E-08	3.791E-09	1.880E-09	1.107E-09	7.248E-10	5.100E-10	3.780E-10	2.913E-10
NNE	2.436E-07	8.237E-08	4.229E-08	2.011E-08	7.222E-09	3.582E-09	2.109E-09	1.381E-09	9.716E-10	7.201E-10	5.549E-10
NE	2.457E-07	8.310E-08	4.267E-08	2.029E-08	7.286E-09	3.614E-09	2.128E-09	1.393E-09	9.803E-10	7.265E-10	5.599E-10
ENE	1.980E-07	6.694E-08	3.437E-08	1.634E-08	5.870E-09	2.911E-09	1.714E-09	1.122E-09	7.897E-10	5.853E-10	4.510E-10
E	1.602E-07	5.417E-08	2.781E-08	1.322E-08	4.749E-09	2.355E-09	1.387E-09	9.081E-10	6.390E-10	4.735E-10	3.649E-10
ESE	1.817E-07	6.145E-08	3.155E-08	1.500E-08	5.388E-09	2.672E-09	1.573E-09	1.030E-09	7.250E-10	5.373E-10	4.140E-10
SE	1.488E-07	5.033E-08	2.584E-08	1.229E-08	4.413E-09	2.189E-09	1.289E-09	8.438E-10	5.938E-10	4.400E-10	3.391E-10
SSE	1.345E-07	4.547E-08	2.335E-08	1.110E-08	3.987E-09	1.977E-09	1.164E-09	7.623E-10	5.364E-10	3.975E-10	3.063E-10

DIRECTION DISTANCES IN MILES

FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.959E-10	8.702E-11	5.271E-11	2.664E-11	1.613E-11	1.081E-11	7.748E-12	5.818E-12	4.523E-12	3.613E-12	2.949E-12
SSW	1.631E-10	7.244E-11	4.388E-11	2.218E-11	1.343E-11	9.001E-12	6.450E-12	4.843E-12	3.766E-12	3.008E-12	2.455E-12
SW	1.932E-10	8.583E-11	5.199E-11	2.628E-11	1.591E-11	1.066E-11	7.642E-12	5.738E-12	4.462E-12	3.564E-12	2.909E-12
WSW	1.781E-10	7.910E-11	4.792E-11	2.422E-11	1.466E-11	9.828E-12	7.042E-12	5.288E-12	4.112E-12	3.284E-12	2.681E-12
W	1.966E-10	8.732E-11	5.289E-11	2.674E-11	1.618E-11	1.085E-11	7.774E-12	5.838E-12	4.539E-12	3.626E-12	2.959E-12
WNW	2.342E-10	1.040E-10	6.301E-11	3.185E-11	1.928E-11	1.292E-11	9.261E-12	6.954E-12	5.407E-12	4.319E-12	3.525E-12
NW	2.238E-10	9.941E-11	6.022E-11	3.044E-11	1.842E-11	1.235E-11	8.850E-12	6.646E-12	5.167E-12	4.128E-12	3.369E-12
NNW	2.002E-10	8.892E-11	5.386E-11	2.723E-11	1.648E-11	1.105E-11	7.917E-12	5.944E-12	4.622E-12	3.692E-12	3.014E-12
N	2.314E-10	1.028E-10	6.227E-11	3.147E-11	1.905E-11	1.277E-11	9.152E-12	6.872E-12	5.343E-12	4.268E-12	3.484E-12
NNE	4.408E-10	1.958E-10	1.186E-10	5.996E-11	3.629E-11	2.433E-11	1.744E-11	1.309E-11	1.018E-11	8.132E-12	6.637E-12
NE	4.448E-10	1.976E-10	1.197E-10	6.050E-11	3.662E-11	2.455E-11	1.759E-11	1.321E-11	1.027E-11	8.204E-12	6.696E-12
ENE	3.583E-10	1.592E-10	9.642E-11	4.873E-11	2.950E-11	1.978E-11	1.417E-11	1.064E-11	8.274E-12	6.609E-12	5.394E-12
E	2.899E-10	1.288E-10	7.801E-11	3.943E-11	2.387E-11	1.600E-11	1.147E-11	8.610E-12	6.694E-12	5.347E-12	4.365E-12
ESE	3.289E-10	1.461E-10	8.851E-11	4.474E-11	2.708E-11	1.815E-11	1.301E-11	9.768E-12	7.595E-12	6.067E-12	4.952E-12
SE	2.694E-10	1.197E-10	7.249E-11	3.664E-11	2.218E-11	1.487E-11	1.065E-11	8.001E-12	6.221E-12	4.969E-12	4.056E-12
SSE	2.434E-10	1.081E-10	6.549E-11	3.310E-11	2.003E-11	1.343E-11	9.625E-12	7.227E-12	5.619E-12	4.489E-12	3.664E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Ground Level/Radwaste Bldg

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.837E-08	3.762E-09	9.822E-10	4.411E-10	2.496E-10	9.597E-11	2.776E-11	1.100E-11	5.876E-12	3.637E-12
SSW	1.529E-08	3.132E-09	8.177E-10	3.672E-10	2.077E-10	7.989E-11	2.311E-11	9.160E-12	4.892E-12	3.028E-12
SW	1.812E-08	3.711E-09	9.688E-10	4.351E-10	2.461E-10	9.466E-11	2.738E-11	1.085E-11	5.796E-12	3.587E-12
WSW	1.670E-08	3.420E-09	8.928E-10	4.010E-10	2.268E-10	8.723E-11	2.524E-11	1.000E-11	5.341E-12	3.306E-12
W	1.843E-08	3.775E-09	9.856E-10	4.426E-10	2.504E-10	9.630E-11	2.786E-11	1.104E-11	5.896E-12	3.649E-12
WNW	2.196E-08	4.497E-09	1.174E-09	5.273E-10	2.983E-10	1.147E-10	3.319E-11	1.315E-11	7.024E-12	4.347E-12
NW	2.098E-08	4.298E-09	1.122E-09	5.039E-10	2.851E-10	1.096E-10	3.171E-11	1.257E-11	6.712E-12	4.155E-12
NNW	1.877E-08	3.844E-09	1.004E-09	4.507E-10	2.550E-10	9.806E-11	2.837E-11	1.124E-11	6.004E-12	3.716E-12
N	2.170E-08	4.444E-09	1.160E-09	5.211E-10	2.948E-10	1.134E-10	3.279E-11	1.300E-11	6.941E-12	4.296E-12
NNE	4.134E-08	8.467E-09	2.210E-09	9.927E-10	5.616E-10	2.160E-10	6.248E-11	2.476E-11	1.322E-11	8.185E-12
NE	4.171E-08	8.543E-09	2.230E-09	1.002E-09	5.666E-10	2.179E-10	6.304E-11	2.498E-11	1.334E-11	8.258E-12
ENE	3.360E-08	6.882E-09	1.797E-09	8.069E-10	4.564E-10	1.755E-10	5.078E-11	2.013E-11	1.075E-11	6.652E-12
E	2.718E-08	5.568E-09	1.454E-09	6.528E-10	3.693E-10	1.420E-10	4.109E-11	1.628E-11	8.696E-12	5.382E-12
ESE	3.084E-08	6.317E-09	1.649E-09	7.407E-10	4.190E-10	1.611E-10	4.662E-11	1.848E-11	9.866E-12	6.107E-12
SE	2.526E-08	5.174E-09	1.351E-09	6.067E-10	3.432E-10	1.320E-10	3.818E-11	1.513E-11	8.081E-12	5.002E-12
SSE	2.282E-08	4.674E-09	1.220E-09	5.480E-10	3.100E-10	1.192E-10	3.449E-11	1.367E-11	7.300E-12	4.518E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

0Fermi COL B

0Ground Level/Radwaste Bldg
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3)	X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
		NO DECAY					
+				2.260 DAY DECAY			
+					8.000 DAY DECAY		
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Meat Cow	NNW	3.05	1.7E-07	1.7E-07	1.4E-07	6.0E-10
	Meat Cow	NNE	4.50	1.9E-07	1.9E-07	1.4E-07	5.6E-10
	Milk Cow	WNW	2.18	3.0E-07	2.9E-07	2.4E-07	1.5E-09
	Milk Cow	NW	3.65	1.1E-07	1.1E-07	8.5E-08	4.5E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.382E-07	2.844E-07	1.768E-07	9.884E-08	6.658E-08	4.903E-08	3.816E-08	3.086E-08	2.568E-08	2.185E-08
SSW	8.151E-07	3.275E-07	2.251E-07	1.505E-07	9.004E-08	6.174E-08	4.547E-08	3.517E-08	2.821E-08	2.328E-08	1.964E-08
SW	1.150E-06	4.523E-07	3.164E-07	2.102E-07	1.178E-07	7.642E-08	5.404E-08	4.055E-08	3.177E-08	2.573E-08	2.137E-08
WSW	1.211E-06	4.644E-07	3.042E-07	1.915E-07	1.008E-07	6.333E-08	4.395E-08	3.258E-08	2.531E-08	2.037E-08	1.704E-08
W	1.611E-06	5.708E-07	3.582E-07	2.179E-07	1.104E-07	6.829E-08	4.710E-08	3.483E-08	2.704E-08	2.177E-08	1.802E-08
WNW	1.858E-06	6.257E-07	3.782E-07	2.329E-07	1.219E-07	7.696E-08	5.378E-08	4.016E-08	3.143E-08	2.547E-08	2.120E-08
NW	1.820E-06	6.145E-07	3.538E-07	2.100E-07	1.090E-07	6.904E-08	4.851E-08	3.643E-08	2.866E-08	2.334E-08	1.962E-08
NNW	1.706E-06	5.681E-07	3.227E-07	1.889E-07	9.915E-08	6.416E-08	4.598E-08	3.511E-08	2.801E-08	2.307E-08	1.973E-08
N	1.751E-06	6.179E-07	3.761E-07	2.313E-07	1.278E-07	8.509E-08	6.201E-08	4.785E-08	3.843E-08	3.180E-08	2.711E-08
NNE	3.590E-06	1.280E-06	7.693E-07	4.495E-07	2.328E-07	1.499E-07	1.071E-07	8.168E-08	6.684E-08	5.634E-08	4.769E-08
NE	2.374E-06	9.402E-07	6.270E-07	3.986E-07	2.256E-07	1.507E-07	1.096E-07	8.423E-08	6.739E-08	5.555E-08	4.688E-08
ENE	1.358E-06	5.324E-07	3.603E-07	2.487E-07	1.630E-07	1.185E-07	9.085E-08	7.241E-08	5.948E-08	5.004E-08	4.292E-08
E	1.061E-06	4.341E-07	2.860E-07	1.909E-07	1.219E-07	8.829E-08	6.794E-08	5.446E-08	4.501E-08	3.809E-08	3.285E-08
ESE	1.198E-06	4.623E-07	2.929E-07	1.918E-07	1.215E-07	8.832E-08	6.843E-08	5.527E-08	4.601E-08	3.921E-08	3.403E-08
SE	1.041E-06	3.935E-07	2.490E-07	1.666E-07	1.086E-07	7.944E-08	6.137E-08	4.927E-08	4.074E-08	3.447E-08	2.972E-08
SSE	1.131E-06	4.349E-07	2.828E-07	1.840E-07	1.110E-07	7.726E-08	5.778E-08	4.534E-08	3.685E-08	3.077E-08	2.625E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.893E-08	1.162E-08	8.383E-09	5.506E-09	4.086E-09	3.244E-09	2.690E-09	2.297E-09	2.003E-09	1.774E-09	1.589E-09
SSW	1.688E-08	9.925E-09	6.920E-09	4.318E-09	3.080E-09	2.368E-09	1.911E-09	1.594E-09	1.363E-09	1.188E-09	1.050E-09

SW	1.813E-08	1.012E-08	6.827E-09	4.078E-09	2.823E-09	2.121E-09	1.679E-09	1.378E-09	1.162E-09	9.993E-10	8.736E-10
WSW	1.456E-08	8.083E-09	5.453E-09	3.268E-09	2.271E-09	1.711E-09	1.357E-09	1.114E-09	9.383E-10	8.054E-10	7.015E-10
W	1.525E-08	8.841E-09	6.167E-09	3.874E-09	2.754E-09	2.073E-09	1.625E-09	1.322E-09	1.106E-09	9.460E-10	8.228E-10
WNW	1.803E-08	1.092E-08	7.906E-09	5.267E-09	3.845E-09	2.897E-09	2.281E-09	1.865E-09	1.567E-09	1.345E-09	1.174E-09
NW	1.685E-08	1.020E-08	7.395E-09	4.977E-09	3.757E-09	2.976E-09	2.408E-09	1.984E-09	1.676E-09	1.444E-09	1.264E-09
NNW	1.720E-08	1.103E-08	8.292E-09	5.771E-09	4.349E-09	3.360E-09	2.666E-09	2.186E-09	1.842E-09	1.585E-09	1.385E-09
N	2.354E-08	1.489E-08	1.100E-08	7.457E-09	5.597E-09	4.399E-09	3.534E-09	2.895E-09	2.433E-09	2.087E-09	1.820E-09
NNE	4.117E-08	2.404E-08	1.678E-08	1.053E-08	7.545E-09	5.821E-09	4.707E-09	3.934E-09	3.368E-09	2.938E-09	2.600E-09
NE	4.033E-08	2.375E-08	1.663E-08	1.047E-08	7.522E-09	5.817E-09	4.716E-09	3.951E-09	3.392E-09	2.966E-09	2.632E-09
ENE	3.742E-08	2.309E-08	1.664E-08	1.086E-08	8.000E-09	6.308E-09	5.200E-09	4.420E-09	3.844E-09	3.402E-09	3.052E-09
E	2.879E-08	1.789E-08	1.293E-08	8.455E-09	6.210E-09	4.869E-09	3.984E-09	3.359E-09	2.896E-09	2.539E-09	2.257E-09
ESE	3.001E-08	1.924E-08	1.426E-08	9.683E-09	7.321E-09	5.880E-09	4.912E-09	4.219E-09	3.698E-09	3.293E-09	2.970E-09
SE	2.604E-08	1.630E-08	1.186E-08	7.845E-09	5.827E-09	4.622E-09	3.827E-09	3.264E-09	2.847E-09	2.525E-09	2.270E-09
SSE	2.279E-08	1.437E-08	1.062E-08	7.307E-09	5.661E-09	4.666E-09	3.987E-09	3.480E-09	3.074E-09	2.733E-09	2.438E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.707E-07	1.018E-07	4.936E-08	3.097E-08	2.190E-08	1.181E-08	5.514E-09	3.247E-09	2.298E-09	1.773E-09
SSW	2.147E-07	9.090E-08	4.569E-08	2.832E-08	1.970E-08	1.014E-08	4.346E-09	2.375E-09	1.597E-09	1.189E-09
SW	2.994E-07	1.200E-07	5.461E-08	3.198E-08	2.146E-08	1.044E-08	4.131E-09	2.131E-09	1.381E-09	1.001E-09
WSW	2.897E-07	1.043E-07	4.457E-08	2.550E-08	1.711E-08	8.353E-09	3.311E-09	1.719E-09	1.117E-09	8.063E-10
W	3.431E-07	1.156E-07	4.784E-08	2.726E-08	1.810E-08	9.076E-09	3.886E-09	2.075E-09	1.326E-09	9.479E-10
WNW	3.686E-07	1.266E-07	5.451E-08	3.165E-08	2.129E-08	1.116E-08	5.221E-09	2.904E-09	1.871E-09	1.348E-09
NW	3.478E-07	1.137E-07	4.915E-08	2.886E-08	1.969E-08	1.043E-08	4.972E-09	2.957E-09	1.988E-09	1.446E-09
NNW	3.178E-07	1.035E-07	4.648E-08	2.816E-08	1.978E-08	1.119E-08	5.699E-09	3.346E-09	2.192E-09	1.587E-09
N	3.655E-07	1.318E-07	6.250E-08	3.859E-08	2.718E-08	1.508E-08	7.417E-09	4.373E-09	2.902E-09	2.091E-09
NNE	7.406E-07	2.441E-07	1.083E-07	6.708E-08	4.784E-08	2.462E-08	1.059E-08	5.835E-09	3.939E-09	2.940E-09
NE	5.951E-07	2.307E-07	1.104E-07	6.769E-08	4.702E-08	2.427E-08	1.053E-08	5.831E-09	3.957E-09	2.969E-09
ENE	3.489E-07	1.623E-07	9.085E-08	5.958E-08	4.299E-08	2.340E-08	1.087E-08	6.316E-09	4.423E-09	3.403E-09
E	2.766E-07	1.223E-07	6.797E-08	4.507E-08	3.290E-08	1.811E-08	8.453E-09	4.873E-09	3.361E-09	2.540E-09
ESE	2.856E-07	1.224E-07	6.847E-08	4.606E-08	3.408E-08	1.942E-08	9.650E-09	5.877E-09	4.219E-09	3.293E-09
SE	2.445E-07	1.085E-07	6.135E-08	4.079E-08	2.976E-08	1.649E-08	7.840E-09	4.626E-09	3.266E-09	2.526E-09
SSE	2.727E-07	1.122E-07	5.800E-08	3.696E-08	2.631E-08	1.457E-08	7.311E-09	4.660E-09	3.470E-09	2.725E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.036E+01	8.038E+01	8.038E+01	8.038E+01	8.038E+01	7.732E+01	6.927E+01	5.972E+01	4.991E+01	4.002E+01
SSW	8.001E+01	7.962E+01	7.962E+01	7.962E+01	7.962E+01	7.724E+01	7.098E+01	6.355E+01	5.592E+01	4.822E+01
SW	7.822E+01	7.753E+01	7.753E+01	7.753E+01	7.753E+01	7.529E+01	6.938E+01	6.237E+01	5.518E+01	4.792E+01

WSW	7.486E+01	7.396E+01	7.396E+01	7.396E+01	7.236E+01	6.690E+01	5.618E+01	4.345E+01	3.039E+01	1.736E+01
W	6.955E+01	6.828E+01	6.828E+01	6.828E+01	6.828E+01	5.855E+01	3.289E+01	8.608E+00	1.732E+00	1.215E+00
WNW	7.213E+01	7.063E+01	7.063E+01	7.063E+01	7.063E+01	5.936E+01	2.968E+01	5.985E+00	1.163E+00	7.944E-01
NW	7.673E+01	7.559E+01	7.559E+01	7.559E+01	7.505E+01	6.692E+01	4.669E+01	2.292E+01	7.056E+00	3.422E+00
NNW	7.613E+01	7.527E+01	7.527E+01	7.527E+01	7.420E+01	6.296E+01	3.577E+01	9.883E+00	2.262E+00	1.598E+00
N	7.721E+01	7.658E+01	7.658E+01	7.658E+01	7.604E+01	6.716E+01	4.497E+01	1.940E+01	4.926E+00	2.492E+00
NNE	7.694E+01	7.706E+01	7.706E+01	7.488E+01	7.253E+01	7.091E+01	6.787E+01	6.427E+01	6.056E+01	5.683E+01
NE	7.865E+01	7.873E+01	7.873E+01	7.873E+01	7.873E+01	7.724E+01	7.331E+01	6.864E+01	6.384E+01	5.901E+01
ENE	8.373E+01	8.378E+01	8.378E+01	8.378E+01	8.378E+01	8.229E+01	7.835E+01	7.368E+01	6.889E+01	6.405E+01
E	8.632E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01
ESE	8.399E+01	8.402E+01	8.402E+01	8.402E+01	8.402E+01	8.355E+01	8.229E+01	8.081E+01	7.928E+01	7.774E+01
SE	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.324E+01	8.074E+01	7.776E+01	7.471E+01	7.163E+01
SSE	8.240E+01	8.240E+01	8.240E+01	8.240E+01	8.240E+01	7.778E+01	6.561E+01	5.117E+01	3.634E+01	2.144E+01

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Fermi COL B

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.379E-07	2.840E-07	1.765E-07	9.860E-08	6.635E-08	4.881E-08	3.795E-08	3.065E-08	2.548E-08	2.165E-08
SSW	8.148E-07	3.272E-07	2.248E-07	1.503E-07	8.982E-08	6.153E-08	4.527E-08	3.498E-08	2.803E-08	2.311E-08	1.948E-08
SW	1.150E-06	4.518E-07	3.159E-07	2.099E-07	1.175E-07	7.616E-08	5.381E-08	4.034E-08	3.157E-08	2.554E-08	2.119E-08
WSW	1.210E-06	4.640E-07	3.038E-07	1.912E-07	1.006E-07	6.314E-08	4.377E-08	3.241E-08	2.516E-08	2.022E-08	1.690E-08
W	1.610E-06	5.704E-07	3.578E-07	2.176E-07	1.101E-07	6.809E-08	4.691E-08	3.466E-08	2.688E-08	2.162E-08	1.787E-08
WNW	1.857E-06	6.252E-07	3.778E-07	2.325E-07	1.216E-07	7.672E-08	5.357E-08	3.997E-08	3.126E-08	2.531E-08	2.104E-08
NW	1.819E-06	6.139E-07	3.533E-07	2.096E-07	1.087E-07	6.878E-08	4.828E-08	3.622E-08	2.847E-08	2.316E-08	1.944E-08
NNW	1.705E-06	5.676E-07	3.222E-07	1.885E-07	9.889E-08	6.393E-08	4.577E-08	3.492E-08	2.783E-08	2.290E-08	1.956E-08
N	1.750E-06	6.173E-07	3.755E-07	2.308E-07	1.275E-07	8.476E-08	6.170E-08	4.755E-08	3.814E-08	3.152E-08	2.684E-08
NNE	3.589E-06	1.279E-06	7.684E-07	4.488E-07	2.323E-07	1.494E-07	1.067E-07	8.125E-08	6.642E-08	5.593E-08	4.729E-08
NE	2.373E-06	9.395E-07	6.263E-07	3.980E-07	2.250E-07	1.502E-07	1.091E-07	8.379E-08	6.697E-08	5.515E-08	4.649E-08
ENE	1.357E-06	5.319E-07	3.599E-07	2.482E-07	1.625E-07	1.180E-07	9.038E-08	7.195E-08	5.903E-08	4.959E-08	4.248E-08
E	1.061E-06	4.337E-07	2.855E-07	1.906E-07	1.215E-07	8.791E-08	6.756E-08	5.408E-08	4.463E-08	3.771E-08	3.248E-08
ESE	1.197E-06	4.619E-07	2.925E-07	1.915E-07	1.211E-07	8.797E-08	6.807E-08	5.490E-08	4.565E-08	3.884E-08	3.367E-08
SE	1.040E-06	3.931E-07	2.487E-07	1.663E-07	1.083E-07	7.912E-08	6.105E-08	4.895E-08	4.042E-08	3.416E-08	2.941E-08
SSE	1.130E-06	4.345E-07	2.825E-07	1.837E-07	1.107E-07	7.698E-08	5.751E-08	4.507E-08	3.659E-08	3.052E-08	2.600E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.874E-08	1.144E-08	8.203E-09	5.324E-09	3.904E-09	3.064E-09	2.511E-09	2.119E-09	1.827E-09	1.599E-09	1.416E-09
SSW	1.672E-08	9.781E-09	6.784E-09	4.188E-09	2.955E-09	2.247E-09	1.793E-09	1.480E-09	1.252E-09	1.078E-09	9.428E-10
SW	1.796E-08	9.967E-09	6.686E-09	3.947E-09	2.700E-09	2.004E-09	1.567E-09	1.271E-09	1.059E-09	9.000E-10	7.775E-10
WSW	1.442E-08	7.964E-09	5.342E-09	3.164E-09	2.173E-09	1.617E-09	1.267E-09	1.028E-09	8.554E-10	7.257E-10	6.249E-10
W	1.511E-08	8.716E-09	6.047E-09	3.759E-09	2.644E-09	1.969E-09	1.527E-09	1.230E-09	1.019E-09	8.631E-10	7.435E-10
WNW	1.789E-08	1.078E-08	7.767E-09	5.121E-09	3.699E-09	2.758E-09	2.150E-09	1.740E-09	1.448E-09	1.231E-09	1.064E-09
NW	1.668E-08	1.004E-08	7.238E-09	4.814E-09	3.589E-09	2.809E-09	2.244E-09	1.827E-09	1.524E-09	1.298E-09	1.124E-09
NNW	1.703E-08	1.087E-08	8.116E-09	5.577E-09	4.146E-09	3.157E-09	2.471E-09	2.002E-09	1.666E-09	1.416E-09	1.224E-09
N	2.328E-08	1.462E-08	1.072E-08	7.169E-09	5.304E-09	4.110E-09	3.255E-09	2.630E-09	2.180E-09	1.846E-09	1.589E-09
NNE	4.078E-08	2.368E-08	1.644E-08	1.020E-08	7.226E-09	5.510E-09	4.406E-09	3.641E-09	3.083E-09	2.659E-09	2.328E-09
NE	3.995E-08	2.340E-08	1.629E-08	1.013E-08	7.193E-09	5.494E-09	4.399E-09	3.640E-09	3.086E-09	2.665E-09	2.335E-09
ENE	3.699E-08	2.267E-08	1.622E-08	1.044E-08	7.581E-09	5.892E-09	4.786E-09	4.009E-09	3.436E-09	2.997E-09	2.650E-09
E	2.843E-08	1.753E-08	1.258E-08	8.097E-09	5.855E-09	4.520E-09	3.641E-09	3.022E-09	2.565E-09	2.215E-09	1.939E-09
ESE	2.965E-08	1.887E-08	1.389E-08	9.299E-09	6.930E-09	5.486E-09	4.517E-09	3.824E-09	3.304E-09	2.901E-09	2.578E-09

SE	2.573E-08	1.600E-08	1.156E-08	7.541E-09	5.523E-09	4.320E-09	3.526E-09	2.965E-09	2.549E-09	2.229E-09	1.976E-09
SSE	2.255E-08	1.413E-08	1.037E-08	7.039E-09	5.378E-09	4.372E-09	3.684E-09	3.171E-09	2.763E-09	2.424E-09	2.133E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.704E-07	1.016E-07	4.914E-08	3.077E-08	2.171E-08	1.162E-08	5.333E-09	3.067E-09	2.120E-09	1.599E-09
SSW	2.144E-07	9.068E-08	4.549E-08	2.814E-08	1.953E-08	9.992E-09	4.217E-09	2.255E-09	1.483E-09	1.080E-09
SW	2.990E-07	1.197E-07	5.438E-08	3.178E-08	2.128E-08	1.028E-08	4.001E-09	2.015E-09	1.275E-09	9.016E-10
WSW	2.894E-07	1.041E-07	4.439E-08	2.535E-08	1.697E-08	8.234E-09	3.207E-09	1.625E-09	1.030E-09	7.268E-10
W	3.428E-07	1.153E-07	4.766E-08	2.710E-08	1.796E-08	8.952E-09	3.772E-09	1.972E-09	1.235E-09	8.651E-10
WNW	3.682E-07	1.263E-07	5.431E-08	3.148E-08	2.114E-08	1.102E-08	5.077E-09	2.766E-09	1.746E-09	1.234E-09
NW	3.473E-07	1.134E-07	4.893E-08	2.866E-08	1.952E-08	1.027E-08	4.808E-09	2.791E-09	1.831E-09	1.301E-09
NNW	3.173E-07	1.033E-07	4.627E-08	2.798E-08	1.961E-08	1.101E-08	5.505E-09	3.146E-09	2.008E-09	1.419E-09
N	3.650E-07	1.315E-07	6.219E-08	3.831E-08	2.691E-08	1.481E-08	7.130E-09	4.086E-09	2.637E-09	1.850E-09
NNE	7.397E-07	2.435E-07	1.079E-07	6.666E-08	4.744E-08	2.426E-08	1.026E-08	5.526E-09	3.647E-09	2.662E-09
NE	5.944E-07	2.302E-07	1.099E-07	6.727E-08	4.663E-08	2.392E-08	1.020E-08	5.509E-09	3.646E-09	2.668E-09
ENE	3.485E-07	1.618E-07	9.038E-08	5.913E-08	4.256E-08	2.298E-08	1.045E-08	5.900E-09	4.013E-09	2.998E-09
E	2.763E-07	1.219E-07	6.759E-08	4.469E-08	3.253E-08	1.775E-08	8.096E-09	4.524E-09	3.025E-09	2.216E-09
ESE	2.852E-07	1.220E-07	6.811E-08	4.570E-08	3.372E-08	1.905E-08	9.266E-09	5.483E-09	3.824E-09	2.901E-09
SE	2.442E-07	1.082E-07	6.103E-08	4.047E-08	2.946E-08	1.619E-08	7.538E-09	4.323E-09	2.967E-09	2.230E-09
SSE	2.724E-07	1.119E-07	5.773E-08	3.670E-08	2.606E-08	1.433E-08	7.041E-09	4.365E-09	3.163E-09	2.417E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.074E-06	4.091E-07	2.636E-07	1.641E-07	9.204E-08	6.201E-08	4.561E-08	3.542E-08	2.858E-08	2.373E-08	2.014E-08
SSW	7.794E-07	3.066E-07	2.101E-07	1.413E-07	8.495E-08	5.823E-08	4.278E-08	3.298E-08	2.637E-08	2.169E-08	1.824E-08
SW	1.102E-06	4.235E-07	2.957E-07	1.975E-07	1.106E-07	7.142E-08	5.022E-08	3.747E-08	2.919E-08	2.351E-08	1.943E-08
WSW	1.161E-06	4.354E-07	2.837E-07	1.789E-07	9.393E-08	5.867E-08	4.046E-08	2.980E-08	2.301E-08	1.841E-08	1.534E-08
W	1.542E-06	5.323E-07	3.314E-07	2.015E-07	1.016E-07	6.250E-08	4.283E-08	3.148E-08	2.431E-08	1.946E-08	1.602E-08
WNW	1.788E-06	5.871E-07	3.514E-07	2.164E-07	1.130E-07	7.097E-08	4.933E-08	3.665E-08	2.854E-08	2.301E-08	1.907E-08

NW	1.756E-06	5.797E-07	3.296E-07	1.950E-07	1.009E-07	6.357E-08	4.444E-08	3.321E-08	2.601E-08	2.108E-08	1.765E-08
NNW	1.640E-06	5.327E-07	2.981E-07	1.742E-07	9.145E-08	5.909E-08	4.226E-08	3.219E-08	2.561E-08	2.104E-08	1.797E-08
N	1.678E-06	5.768E-07	3.469E-07	2.137E-07	1.186E-07	7.905E-08	5.757E-08	4.436E-08	3.557E-08	2.937E-08	2.501E-08
NNE	3.426E-06	1.188E-06	7.048E-07	4.110E-07	2.130E-07	1.370E-07	9.783E-08	7.443E-08	6.091E-08	5.134E-08	4.338E-08
NE	2.268E-06	8.786E-07	5.833E-07	3.719E-07	2.111E-07	1.408E-07	1.021E-07	7.830E-08	6.246E-08	5.134E-08	4.320E-08
ENE	1.308E-06	5.028E-07	3.390E-07	2.354E-07	1.554E-07	1.130E-07	8.652E-08	6.882E-08	5.639E-08	4.733E-08	4.050E-08
E	1.026E-06	4.133E-07	2.704E-07	1.811E-07	1.162E-07	8.420E-08	6.471E-08	5.177E-08	4.269E-08	3.604E-08	3.101E-08
ESE	1.160E-06	4.399E-07	2.764E-07	1.815E-07	1.156E-07	8.416E-08	6.518E-08	5.258E-08	4.371E-08	3.719E-08	3.223E-08
SE	1.009E-06	3.745E-07	2.351E-07	1.580E-07	1.036E-07	7.589E-08	5.857E-08	4.694E-08	3.874E-08	3.271E-08	2.814E-08
SSE	1.087E-06	4.098E-07	2.648E-07	1.729E-07	1.048E-07	7.293E-08	5.444E-08	4.261E-08	3.454E-08	2.876E-08	2.446E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.741E-08	1.060E-08	7.594E-09	4.936E-09	3.634E-09	2.868E-09	2.364E-09	1.995E-09	1.699E-09	1.464E-09	1.275E-09
SSW	1.563E-08	9.073E-09	6.262E-09	3.845E-09	2.709E-09	2.061E-09	1.648E-09	1.362E-09	1.148E-09	9.813E-10	8.470E-10
SW	1.640E-08	8.970E-09	5.952E-09	3.461E-09	2.344E-09	1.729E-09	1.346E-09	1.086E-09	8.965E-10	7.530E-10	6.417E-10
WSW	1.305E-08	7.096E-09	4.705E-09	2.742E-09	1.852E-09	1.345E-09	1.025E-09	8.099E-10	6.576E-10	5.461E-10	4.616E-10
W	1.350E-08	7.715E-09	5.314E-09	3.204E-09	2.145E-09	1.543E-09	1.163E-09	9.132E-10	7.399E-10	6.138E-10	5.188E-10
WNW	1.615E-08	9.683E-09	6.950E-09	4.420E-09	3.040E-09	2.196E-09	1.665E-09	1.316E-09	1.071E-09	8.930E-10	7.580E-10
NW	1.511E-08	9.051E-09	6.505E-09	4.248E-09	3.022E-09	2.268E-09	1.763E-09	1.402E-09	1.145E-09	9.572E-10	8.142E-10
NNW	1.564E-08	1.001E-08	7.488E-09	5.010E-09	3.532E-09	2.606E-09	1.991E-09	1.577E-09	1.287E-09	1.074E-09	9.133E-10
N	2.168E-08	1.367E-08	1.005E-08	6.681E-09	4.726E-09	3.514E-09	2.711E-09	2.146E-09	1.747E-09	1.456E-09	1.235E-09
NNE	3.738E-08	2.163E-08	1.497E-08	9.258E-09	6.555E-09	5.003E-09	4.008E-09	3.317E-09	2.803E-09	2.415E-09	2.107E-09
NE	3.706E-08	2.159E-08	1.499E-08	9.305E-09	6.609E-09	5.062E-09	4.069E-09	3.381E-09	2.868E-09	2.481E-09	2.175E-09
ENE	3.523E-08	2.154E-08	1.541E-08	9.949E-09	7.261E-09	5.681E-09	4.651E-09	3.927E-09	3.378E-09	2.961E-09	2.626E-09
E	2.713E-08	1.670E-08	1.198E-08	7.732E-09	5.617E-09	4.361E-09	3.537E-09	2.956E-09	2.521E-09	2.190E-09	1.926E-09
ESE	2.838E-08	1.808E-08	1.333E-08	8.974E-09	6.734E-09	5.373E-09	4.461E-09	3.808E-09	3.303E-09	2.914E-09	2.599E-09
SE	2.461E-08	1.527E-08	1.104E-08	7.223E-09	5.317E-09	4.185E-09	3.441E-09	2.915E-09	2.514E-09	2.209E-09	1.964E-09
SSE	2.119E-08	1.325E-08	9.737E-09	6.651E-09	5.127E-09	4.193E-09	3.487E-09	2.933E-09	2.502E-09	2.153E-09	1.870E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.517E-07	9.471E-08	4.591E-08	2.869E-08	2.019E-08	1.078E-08	4.948E-09	2.871E-09	1.987E-09	1.463E-09
SSW	2.009E-07	8.559E-08	4.298E-08	2.648E-08	1.829E-08	9.280E-09	3.877E-09	2.069E-09	1.362E-09	9.810E-10
SW	2.804E-07	1.125E-07	5.077E-08	2.939E-08	1.952E-08	9.279E-09	3.518E-09	1.740E-09	1.088E-09	7.543E-10
WSW	2.708E-07	9.714E-08	4.105E-08	2.320E-08	1.540E-08	7.356E-09	2.783E-09	1.352E-09	8.134E-10	5.478E-10
W	3.183E-07	1.064E-07	4.354E-08	2.451E-08	1.611E-08	7.933E-09	3.202E-09	1.551E-09	9.184E-10	6.160E-10
WNW	3.438E-07	1.173E-07	5.003E-08	2.875E-08	1.916E-08	9.906E-09	4.369E-09	2.209E-09	1.322E-09	8.958E-10
NW	3.254E-07	1.052E-07	4.505E-08	2.619E-08	1.773E-08	9.265E-09	4.205E-09	2.267E-09	1.407E-09	9.600E-10
NNW	2.952E-07	9.547E-08	4.272E-08	2.575E-08	1.802E-08	1.014E-08	4.904E-09	2.607E-09	1.585E-09	1.078E-09

N	3.388E-07	1.222E-07	5.801E-08	3.572E-08	2.507E-08	1.384E-08	6.561E-09	3.516E-09	2.156E-09	1.460E-09
NNE	6.816E-07	2.232E-07	9.893E-08	6.113E-08	4.352E-08	2.217E-08	9.326E-09	5.019E-09	3.319E-09	2.416E-09
NE	5.550E-07	2.156E-07	1.029E-07	6.275E-08	4.334E-08	2.210E-08	9.370E-09	5.077E-09	3.382E-09	2.482E-09
ENE	3.294E-07	1.543E-07	8.651E-08	5.649E-08	4.057E-08	2.186E-08	9.968E-09	5.690E-09	3.924E-09	2.960E-09
E	2.625E-07	1.164E-07	6.473E-08	4.275E-08	3.106E-08	1.692E-08	7.736E-09	4.366E-09	2.957E-09	2.191E-09
ESE	2.706E-07	1.163E-07	6.520E-08	4.376E-08	3.228E-08	1.826E-08	8.946E-09	5.371E-09	3.802E-09	2.912E-09
SE	2.318E-07	1.034E-07	5.854E-08	3.879E-08	2.819E-08	1.547E-08	7.224E-09	4.190E-09	2.913E-09	2.209E-09
SSE	2.562E-07	1.058E-07	5.464E-08	3.464E-08	2.452E-08	1.345E-08	6.660E-09	4.160E-09	2.927E-09	2.151E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.787E-08	9.225E-09	5.746E-09	3.117E-09	1.271E-09	6.818E-10	4.230E-10	2.880E-10	2.087E-10	1.582E-10	1.240E-10
SSW	1.393E-08	7.387E-09	4.722E-09	2.618E-09	1.089E-09	5.924E-10	3.711E-10	2.542E-10	1.849E-10	1.405E-10	1.103E-10
SW	1.964E-08	1.080E-08	7.021E-09	3.896E-09	1.623E-09	8.739E-10	5.427E-10	3.696E-10	2.679E-10	2.030E-10	1.592E-10
WSW	2.364E-08	1.231E-08	7.566E-09	4.042E-09	1.629E-09	8.609E-10	5.284E-10	3.572E-10	2.576E-10	1.947E-10	1.525E-10
W	3.098E-08	1.498E-08	8.799E-09	4.683E-09	1.849E-09	9.621E-10	5.842E-10	3.919E-10	2.812E-10	2.117E-10	1.654E-10
WNW	3.293E-08	1.672E-08	9.777E-09	5.230E-09	2.037E-09	1.059E-09	6.436E-10	4.323E-10	3.106E-10	2.343E-10	1.833E-10
NW	3.046E-08	1.598E-08	9.347E-09	4.979E-09	1.912E-09	9.908E-10	6.017E-10	4.041E-10	2.904E-10	2.192E-10	1.716E-10
NNW	2.560E-08	1.298E-08	7.482E-09	3.797E-09	1.431E-09	7.439E-10	4.535E-10	3.056E-10	2.203E-10	1.667E-10	1.307E-10
N	2.409E-08	1.210E-08	7.197E-09	3.737E-09	1.441E-09	7.557E-10	4.630E-10	3.129E-10	2.258E-10	1.709E-10	1.340E-10
NNE	5.377E-08	2.552E-08	1.482E-08	7.640E-09	2.974E-09	1.553E-09	9.467E-10	6.371E-10	4.583E-10	3.458E-10	2.704E-10
NE	4.735E-08	2.442E-08	1.519E-08	8.230E-09	3.373E-09	1.800E-09	1.112E-09	7.543E-10	5.453E-10	4.126E-10	3.231E-10
ENE	2.780E-08	1.523E-08	9.593E-09	5.275E-09	2.177E-09	1.186E-09	7.448E-10	5.113E-10	3.726E-10	2.834E-10	2.227E-10
E	2.355E-08	1.315E-08	8.209E-09	4.450E-09	1.795E-09	9.714E-10	6.079E-10	4.167E-10	3.036E-10	2.310E-10	1.817E-10
ESE	2.561E-08	1.419E-08	8.748E-09	4.679E-09	1.858E-09	9.967E-10	6.202E-10	4.237E-10	3.080E-10	2.341E-10	1.841E-10
SE	2.179E-08	1.208E-08	7.441E-09	3.994E-09	1.593E-09	8.591E-10	5.366E-10	3.675E-10	2.676E-10	2.036E-10	1.601E-10
SSE	2.134E-08	1.151E-08	7.121E-09	3.854E-09	1.562E-09	8.443E-10	5.275E-10	3.611E-10	2.627E-10	1.997E-10	1.569E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.983E-11	4.609E-11	2.784E-11	1.455E-11	9.251E-12	6.712E-12	6.386E-12	7.975E-12	7.180E-12	6.172E-12	5.025E-12
SSW	8.879E-11	4.112E-11	2.486E-11	1.298E-11	8.222E-12	5.903E-12	4.814E-12	4.275E-12	4.384E-12	4.705E-12	3.992E-12
SW	1.281E-10	5.895E-11	3.579E-11	1.828E-11	1.153E-11	8.209E-12	6.467E-12	5.765E-12	5.760E-12	4.971E-12	4.160E-12
WSW	1.249E-10	5.693E-11	3.408E-11	1.919E-11	1.434E-11	1.209E-11	9.094E-12	6.965E-12	5.401E-12	4.384E-12	3.593E-12
W	1.329E-10	6.063E-11	4.049E-11	3.015E-11	1.944E-11	1.339E-11	9.759E-12	7.364E-12	5.728E-12	4.577E-12	3.737E-12
WNW	1.475E-10	6.847E-11	5.289E-11	3.789E-11	2.357E-11	1.625E-11	1.176E-11	8.835E-12	6.872E-12	5.496E-12	4.487E-12
NW	1.382E-10	6.369E-11	4.251E-11	3.621E-11	2.435E-11	1.598E-11	1.125E-11	8.486E-12	6.588E-12	5.266E-12	4.300E-12
NNW	1.079E-10	4.972E-11	3.510E-11	3.585E-11	2.210E-11	1.425E-11	1.024E-11	7.738E-12	6.021E-12	4.813E-12	3.926E-12
N	1.080E-10	5.087E-11	3.168E-11	4.047E-11	2.870E-11	1.750E-11	1.220E-11	9.193E-12	7.159E-12	5.723E-12	4.674E-12
NNE	2.175E-10	1.000E-10	6.065E-11	3.193E-11	2.045E-11	1.475E-11	1.146E-11	9.780E-12	8.213E-12	8.668E-12	7.393E-12
NE	2.600E-10	1.193E-10	7.167E-11	3.706E-11	2.353E-11	1.672E-11	1.279E-11	1.024E-11	8.629E-12	7.311E-12	6.637E-12
ENE	1.796E-10	8.362E-11	5.082E-11	2.672E-11	1.715E-11	1.235E-11	9.565E-12	7.756E-12	6.536E-12	5.603E-12	4.987E-12
E	1.466E-10	6.865E-11	4.195E-11	2.226E-11	1.428E-11	1.045E-11	8.117E-12	6.557E-12	5.463E-12	4.634E-12	4.008E-12
ESE	1.486E-10	6.960E-11	4.259E-11	2.268E-11	1.461E-11	1.079E-11	8.478E-12	7.001E-12	5.945E-12	5.134E-12	4.500E-12
SE	1.293E-10	6.064E-11	3.715E-11	1.981E-11	1.277E-11	9.415E-12	7.310E-12	5.972E-12	5.055E-12	4.351E-12	3.823E-12
SSE	1.265E-10	5.898E-11	3.645E-11	1.906E-11	1.267E-11	1.530E-11	1.482E-11	1.163E-11	9.017E-12	6.784E-12	5.275E-12

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Fermi COL B

Reactor Bldg/Fuel Bldg Stack

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******************     RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS     *****************
                                        SEGMENT BOUNDARIES IN MILES
DIRECTION .5-1     1-2       2-3       3-4       4-5       5-10      10-20     20-30     30-40     40-50
 FROM SITE
    S 5.350E-09 1.419E-09 4.380E-10 2.121E-10 1.252E-10 4.992E-11 1.515E-11 7.259E-12 7.218E-12 6.046E-12
  SSW 4.379E-09 1.208E-09 3.833E-10 1.878E-10 1.113E-10 4.449E-11 1.351E-11 6.086E-12 4.470E-12 4.346E-12
   SW 6.472E-09 1.795E-09 5.618E-10 2.723E-10 1.607E-10 6.403E-11 1.917E-11 8.397E-12 5.964E-12 4.904E-12
  WSW 7.053E-09 1.824E-09 5.486E-10 2.621E-10 1.548E-10 6.188E-11 2.034E-11 1.149E-11 6.977E-12 4.392E-12
    W 8.344E-09 2.085E-09 6.081E-10 2.863E-10 1.671E-10 6.774E-11 2.769E-11 1.355E-11 7.425E-12 4.607E-12
  WNW 9.300E-09 2.312E-09 6.698E-10 3.163E-10 1.851E-10 7.911E-11 3.486E-11 1.641E-11 8.924E-12 5.530E-12
   NW 8.880E-09 2.184E-09 6.264E-10 2.957E-10 1.733E-10 7.084E-11 3.234E-11 1.632E-11 8.554E-12 5.300E-12
  NNW 7.066E-09 1.652E-09 4.718E-10 2.242E-10 1.329E-10 5.614E-11 2.957E-11 1.474E-11 7.800E-12 4.843E-12
    N 6.749E-09 1.647E-09 4.810E-10 2.297E-10 1.353E-10 5.504E-11 3.329E-11 1.837E-11 9.276E-12 5.760E-12
  NNE 1.401E-08 3.379E-09 9.844E-10 4.665E-10 2.732E-10 1.086E-10 3.321E-11 1.495E-11 9.662E-12 8.061E-12
   NE 1.415E-08 3.753E-09 1.152E-09 5.545E-10 3.262E-10 1.294E-10 3.874E-11 1.696E-11 1.035E-11 7.452E-12
  ENE 8.927E-09 2.425E-09 7.691E-10 3.782E-10 2.247E-10 9.036E-11 2.782E-11 1.251E-11 7.808E-12 5.651E-12
    E 7.637E-09 2.019E-09 6.284E-10 3.082E-10 1.833E-10 7.411E-11 2.309E-11 1.054E-11 6.586E-12 4.648E-12
  ESE 8.150E-09 2.102E-09 6.420E-10 3.129E-10 1.857E-10 7.515E-11 2.352E-11 1.088E-11 7.021E-12 5.140E-12
   SE 6.940E-09 1.800E-09 5.550E-10 2.717E-10 1.616E-10 6.545E-11 2.053E-11 9.466E-12 6.005E-12 4.364E-12
  SSE 6.644E-09 1.752E-09 5.454E-10 2.668E-10 1.583E-10 6.397E-11 2.008E-11 1.440E-11 1.155E-11 6.887E-12

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   52.62                    REP. WIND HEIGHT       (METERS)       52.6
     DIAMETER        (METERS)    2.40                    BUILDING HEIGHT        (METERS)       48.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)      /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                  /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556             /      ELEVATED        LESS THAN  1.550              LESS THAN  2.348
     MIXED           BETWEEN    3.556 AND 17.780  /      MIXED           BETWEEN    1.550 AND  7.751   BETWEEN    2.348 AND 11.739
     GROUND LEVEL    ABOVE     17.780             /      GROUND LEVEL    ABOVE      7.751              ABOVE     11.739
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:20

0Fermi COL B

0Reactor Bldg/Fuel Bldg Stack
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS
 SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF  DIRECTION DIST.  X/Q       X/Q       X/Q       D/Q
  ID    LOCATION FROM SITE (MI) (SEC/M3)  (SEC/M3)  (SEC/M3) (PER SQ.METER)
                  NO DECAY
+                               2.260 DAY DECAY
+                                                 8.000 DAY DECAY
                 UNDEPLETED      UNDEPLETED        DEPLETED
     Meat  Cow    NNW   3.05   3.4E-08   3.4E-08   3.1E-08   3.0E-10
     Meat  Cow    NNE   4.50   4.8E-08   4.7E-08   4.3E-08   2.7E-10
     Milk Cow     WNW   2.18   6.7E-08   6.6E-08   6.1E-08   8.7E-10
     Milk Cow      NW   3.65   2.7E-08   2.7E-08   2.4E-08   2.7E-10

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   52.62                    REP. WIND HEIGHT       (METERS)       52.6
     DIAMETER        (METERS)    2.40                    BUILDING HEIGHT        (METERS)       48.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
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VENT RELEASE MODE	WIND SPEED (METERS/SEC)	/	VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 3.556	/	ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 3.556 AND 17.780	/	MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 17.780	/	GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.573E-06	5.571E-07	3.247E-07	1.841E-07	9.270E-08	5.992E-08	4.328E-08	3.333E-08	2.679E-08	2.220E-08	1.884E-08
SSW	1.104E-06	4.051E-07	2.451E-07	1.456E-07	7.866E-08	5.255E-08	3.847E-08	2.975E-08	2.390E-08	1.976E-08	1.670E-08
SW	1.318E-06	4.872E-07	2.977E-07	1.813E-07	9.805E-08	6.392E-08	4.564E-08	3.455E-08	2.726E-08	2.220E-08	1.853E-08
WSW	1.323E-06	4.817E-07	2.832E-07	1.662E-07	8.516E-08	5.372E-08	3.757E-08	2.805E-08	2.193E-08	1.773E-08	1.488E-08
W	1.817E-06	6.197E-07	3.540E-07	2.008E-07	9.768E-08	6.007E-08	4.147E-08	3.074E-08	2.394E-08	1.932E-08	1.602E-08
WNW	2.105E-06	6.935E-07	3.838E-07	2.173E-07	1.078E-07	6.733E-08	4.700E-08	3.514E-08	2.754E-08	2.235E-08	1.863E-08
NW	2.048E-06	6.823E-07	3.660E-07	2.013E-07	9.813E-08	6.110E-08	4.269E-08	3.199E-08	2.515E-08	2.048E-08	1.719E-08
NNW	2.002E-06	6.562E-07	3.513E-07	1.905E-07	9.135E-08	5.698E-08	4.013E-08	3.036E-08	2.409E-08	1.978E-08	1.683E-08
N	2.181E-06	7.420E-07	4.171E-07	2.323E-07	1.151E-07	7.346E-08	5.261E-08	4.028E-08	3.224E-08	2.664E-08	2.267E-08
NNE	4.422E-06	1.508E-06	8.504E-07	4.635E-07	2.193E-07	1.357E-07	9.519E-08	7.183E-08	5.804E-08	4.850E-08	4.096E-08
NE	3.110E-06	1.134E-06	6.726E-07	3.879E-07	2.001E-07	1.299E-07	9.351E-08	7.161E-08	5.720E-08	4.714E-08	3.978E-08
ENE	2.042E-06	7.337E-07	4.306E-07	2.553E-07	1.436E-07	9.960E-08	7.510E-08	5.947E-08	4.872E-08	4.094E-08	3.510E-08
E	1.442E-06	5.426E-07	3.192E-07	1.880E-07	1.052E-07	7.297E-08	5.525E-08	4.397E-08	3.620E-08	3.057E-08	2.633E-08
ESE	1.870E-06	6.580E-07	3.707E-07	2.113E-07	1.132E-07	7.711E-08	5.792E-08	4.597E-08	3.785E-08	3.200E-08	2.762E-08
SE	1.564E-06	5.521E-07	3.121E-07	1.797E-07	9.864E-08	6.803E-08	5.134E-08	4.077E-08	3.352E-08	2.827E-08	2.432E-08
SSE	1.629E-06	5.764E-07	3.336E-07	1.928E-07	1.024E-07	6.829E-08	5.016E-08	3.900E-08	3.153E-08	2.623E-08	2.232E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.629E-08	9.906E-09	7.108E-09	4.640E-09	3.432E-09	2.722E-09	2.257E-09	1.931E-09	1.689E-09	1.503E-09	1.353E-09
SSW	1.438E-08	8.497E-09	5.942E-09	3.718E-09	2.657E-09	2.045E-09	1.651E-09	1.379E-09	1.181E-09	1.031E-09	9.131E-10
SW	1.578E-08	8.905E-09	6.043E-09	3.631E-09	2.521E-09	1.897E-09	1.504E-09	1.236E-09	1.043E-09	8.979E-10	7.857E-10
WSW	1.275E-08	7.155E-09	4.855E-09	2.930E-09	2.045E-09	1.546E-09	1.230E-09	1.013E-09	8.561E-10	7.374E-10	6.445E-10
W	1.359E-08	7.876E-09	5.494E-09	3.468E-09	2.497E-09	1.916E-09	1.518E-09	1.236E-09	1.034E-09	8.845E-10	7.692E-10
WNW	1.586E-08	9.499E-09	6.827E-09	4.563E-09	3.426E-09	2.668E-09	2.110E-09	1.725E-09	1.450E-09	1.244E-09	1.086E-09
NW	1.475E-08	8.826E-09	6.345E-09	4.247E-09	3.235E-09	2.617E-09	2.175E-09	1.827E-09	1.548E-09	1.334E-09	1.167E-09
NNW	1.462E-08	9.238E-09	6.909E-09	4.854E-09	3.763E-09	3.016E-09	2.434E-09	2.000E-09	1.685E-09	1.450E-09	1.268E-09
N	1.968E-08	1.239E-08	9.153E-09	6.258E-09	4.770E-09	3.832E-09	3.156E-09	2.628E-09	2.212E-09	1.898E-09	1.655E-09
NNE	3.531E-08	2.063E-08	1.444E-08	9.098E-09	6.541E-09	5.057E-09	4.096E-09	3.428E-09	2.938E-09	2.565E-09	2.272E-09
NE	3.424E-08	2.018E-08	1.416E-08	8.933E-09	6.428E-09	4.974E-09	4.034E-09	3.381E-09	2.904E-09	2.540E-09	2.255E-09
ENE	3.061E-08	1.888E-08	1.360E-08	8.877E-09	6.532E-09	5.146E-09	4.238E-09	3.601E-09	3.131E-09	2.771E-09	2.488E-09
E	2.306E-08	1.429E-08	1.031E-08	6.730E-09	4.938E-09	3.869E-09	3.164E-09	2.667E-09	2.298E-09	2.015E-09	1.791E-09
ESE	2.425E-08	1.530E-08	1.123E-08	7.539E-09	5.662E-09	4.529E-09	3.772E-09	3.234E-09	2.831E-09	2.519E-09	2.270E-09
SE	2.128E-08	1.325E-08	9.606E-09	6.321E-09	4.678E-09	3.700E-09	3.056E-09	2.603E-09	2.267E-09	2.010E-09	1.806E-09
SSE	1.934E-08	1.201E-08	8.768E-09	5.931E-09	4.552E-09	3.746E-09	3.216E-09	2.836E-09	2.542E-09	2.300E-09	2.092E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

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AT THE RELEASE HEIGHT:                                  /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)            /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                        /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556                   /      ELEVATED        LESS THAN  1.332              LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780        /      MIXED           BETWEEN    1.332 AND  6.659   BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780                   /      GROUND LEVEL    ABOVE      6.659              ABOVE     10.881
USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0              RUN DATE:  6-26-2008    17:20
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Fermi COL B

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.139E-07	9.845E-08	4.374E-08	2.691E-08	1.889E-08	1.008E-08	4.652E-09	2.725E-09	1.932E-09	1.503E-09
SSW	2.364E-07	8.194E-08	3.873E-08	2.399E-08	1.675E-08	8.669E-09	3.740E-09	2.051E-09	1.382E-09	1.032E-09
SW	2.881E-07	1.014E-07	4.608E-08	2.742E-08	1.860E-08	9.159E-09	3.674E-09	1.906E-09	1.239E-09	8.993E-10
WSW	2.753E-07	8.920E-08	3.807E-08	2.208E-08	1.494E-08	7.376E-09	2.965E-09	1.553E-09	1.015E-09	7.382E-10
W	3.450E-07	1.039E-07	4.214E-08	2.412E-08	1.610E-08	8.087E-09	3.487E-09	1.912E-09	1.240E-09	8.862E-10
WNW	3.787E-07	1.141E-07	4.768E-08	2.774E-08	1.871E-08	9.725E-09	4.561E-09	2.647E-09	1.730E-09	1.247E-09
NW	3.631E-07	1.046E-07	4.332E-08	2.533E-08	1.726E-08	9.039E-09	4.264E-09	2.605E-09	1.820E-09	1.335E-09
NNW	3.476E-07	9.810E-08	4.071E-08	2.424E-08	1.689E-08	9.400E-09	4.826E-09	2.982E-09	2.004E-09	1.452E-09
N	4.072E-07	1.226E-07	5.324E-08	3.240E-08	2.274E-08	1.257E-08	6.240E-09	3.812E-09	2.620E-09	1.901E-09
NNE	8.247E-07	2.364E-07	9.665E-08	5.835E-08	4.110E-08	2.114E-08	9.148E-09	5.069E-09	3.432E-09	2.567E-09
NE	6.486E-07	2.106E-07	9.445E-08	5.748E-08	3.991E-08	2.063E-08	8.981E-09	4.986E-09	3.386E-09	2.542E-09
ENE	4.200E-07	1.488E-07	7.538E-08	4.883E-08	3.517E-08	1.914E-08	8.885E-09	5.153E-09	3.604E-09	2.773E-09
E	3.105E-07	1.093E-07	5.547E-08	3.628E-08	2.637E-08	1.447E-08	6.730E-09	3.872E-09	2.668E-09	2.016E-09
ESE	3.637E-07	1.190E-07	5.826E-08	3.794E-08	2.767E-08	1.548E-08	7.525E-09	4.528E-09	3.234E-09	2.519E-09
SE	3.066E-07	1.030E-07	5.156E-08	3.359E-08	2.436E-08	1.341E-08	6.320E-09	3.703E-09	2.605E-09	2.011E-09
SSE	3.250E-07	1.073E-07	5.053E-08	3.164E-08	2.238E-08	1.220E-08	5.948E-09	3.749E-09	2.833E-09	2.295E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.237E+01	9.237E+01	9.237E+01	9.237E+01	9.237E+01	8.933E+01	8.130E+01	7.178E+01	6.200E+01	5.214E+01
SSW	9.181E+01	9.142E+01	9.142E+01	9.142E+01	9.142E+01	8.905E+01	8.279E+01	7.536E+01	6.774E+01	6.006E+01
SW	8.991E+01	8.915E+01	8.915E+01	8.915E+01	8.915E+01	8.691E+01	8.101E+01	7.400E+01	6.680E+01	5.955E+01
WSW	8.694E+01	8.600E+01	8.600E+01	8.600E+01	8.439E+01	7.894E+01	6.823E+01	5.553E+01	4.249E+01	2.933E+01
W	8.153E+01	8.022E+01	8.022E+01	8.022E+01	8.022E+01	7.063E+01	4.534E+01	1.631E+01	2.086E+00	9.013E-01
WNW	8.411E+01	8.258E+01	8.258E+01	8.258E+01	8.258E+01	7.137E+01	4.181E+01	1.113E+01	1.006E+00	5.691E-01
NW	8.818E+01	8.688E+01	8.688E+01	8.688E+01	8.634E+01	7.821E+01	5.801E+01	3.404E+01	1.178E+01	2.957E+00
NNW	8.811E+01	8.717E+01	8.717E+01	8.717E+01	8.610E+01	7.488E+01	4.772E+01	1.685E+01	2.338E+00	1.160E+00
N	8.907E+01	8.833E+01	8.833E+01	8.833E+01	8.780E+01	7.895E+01	5.683E+01	3.059E+01	8.600E+00	2.056E+00
NNE	8.938E+01	8.941E+01	8.941E+01	8.723E+01	8.490E+01	8.329E+01	8.026E+01	7.667E+01	7.299E+01	6.927E+01
NE	9.110E+01	9.112E+01	9.112E+01	9.112E+01	9.112E+01	8.963E+01	8.570E+01	8.104E+01	7.626E+01	7.143E+01
ENE	9.526E+01	9.527E+01	9.527E+01	9.527E+01	9.527E+01	9.378E+01	8.985E+01	8.518E+01	8.039E+01	7.556E+01
E	9.725E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01
ESE	9.564E+01	9.565E+01	9.565E+01	9.565E+01	9.565E+01	9.517E+01	9.392E+01	9.244E+01	9.091E+01	8.937E+01
SE	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.475E+01	9.224E+01	8.927E+01	8.622E+01	8.314E+01
SSE	9.413E+01	9.413E+01	9.413E+01	9.413E+01	9.413E+01	8.952E+01	7.736E+01	6.293E+01	4.812E+01	3.319E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.572E-06	5.565E-07	3.242E-07	1.838E-07	9.244E-08	5.970E-08	4.307E-08	3.314E-08	2.661E-08	2.203E-08	1.867E-08
SSW	1.104E-06	4.047E-07	2.447E-07	1.454E-07	7.844E-08	5.236E-08	3.829E-08	2.958E-08	2.375E-08	1.961E-08	1.656E-08
SW	1.317E-06	4.867E-07	2.973E-07	1.810E-07	9.780E-08	6.371E-08	4.545E-08	3.437E-08	2.710E-08	2.204E-08	1.838E-08
WSW	1.323E-06	4.813E-07	2.828E-07	1.659E-07	8.496E-08	5.355E-08	3.742E-08	2.792E-08	2.180E-08	1.761E-08	1.477E-08
W	1.817E-06	6.192E-07	3.536E-07	2.005E-07	9.746E-08	5.989E-08	4.131E-08	3.060E-08	2.380E-08	1.919E-08	1.590E-08
WNW	2.104E-06	6.929E-07	3.834E-07	2.170E-07	1.075E-07	6.711E-08	4.681E-08	3.497E-08	2.739E-08	2.221E-08	1.849E-08
NW	2.047E-06	6.816E-07	3.654E-07	2.009E-07	9.785E-08	6.087E-08	4.249E-08	3.181E-08	2.498E-08	2.032E-08	1.704E-08
NNW	2.001E-06	6.555E-07	3.508E-07	1.901E-07	9.109E-08	5.677E-08	3.994E-08	3.019E-08	2.393E-08	1.964E-08	1.669E-08
N	2.180E-06	7.412E-07	4.165E-07	2.319E-07	1.147E-07	7.318E-08	5.235E-08	4.003E-08	3.201E-08	2.642E-08	2.246E-08
NNE	4.420E-06	1.507E-06	8.493E-07	4.627E-07	2.187E-07	1.352E-07	9.477E-08	7.145E-08	5.768E-08	4.816E-08	4.062E-08
NE	3.108E-06	1.133E-06	6.716E-07	3.872E-07	1.996E-07	1.295E-07	9.311E-08	7.124E-08	5.685E-08	4.680E-08	3.946E-08
ENE	2.041E-06	7.328E-07	4.299E-07	2.547E-07	1.431E-07	9.919E-08	7.472E-08	5.910E-08	4.836E-08	4.059E-08	3.477E-08
E	1.442E-06	5.419E-07	3.186E-07	1.876E-07	1.048E-07	7.266E-08	5.495E-08	4.368E-08	3.592E-08	3.029E-08	2.605E-08
ESE	1.869E-06	6.572E-07	3.701E-07	2.109E-07	1.129E-07	7.678E-08	5.761E-08	4.567E-08	3.756E-08	3.172E-08	2.734E-08
SE	1.563E-06	5.514E-07	3.116E-07	1.793E-07	9.833E-08	6.774E-08	5.107E-08	4.051E-08	3.327E-08	2.802E-08	2.408E-08
SSE	1.628E-06	5.758E-07	3.331E-07	1.924E-07	1.021E-07	6.803E-08	4.991E-08	3.877E-08	3.131E-08	2.602E-08	2.211E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.613E-08	9.755E-09	6.962E-09	4.496E-09	3.289E-09	2.580E-09	2.117E-09	1.792E-09	1.551E-09	1.365E-09	1.217E-09
SSW	1.425E-08	8.379E-09	5.831E-09	3.613E-09	2.556E-09	1.948E-09	1.558E-09	1.288E-09	1.092E-09	9.437E-10	8.275E-10
SW	1.563E-08	8.780E-09	5.927E-09	3.523E-09	2.420E-09	1.801E-09	1.412E-09	1.147E-09	9.574E-10	8.155E-10	7.060E-10
WSW	1.264E-08	7.058E-09	4.765E-09	2.845E-09	1.964E-09	1.468E-09	1.155E-09	9.411E-10	7.866E-10	6.702E-10	5.797E-10
W	1.347E-08	7.774E-09	5.396E-09	3.372E-09	2.405E-09	1.827E-09	1.434E-09	1.156E-09	9.589E-10	8.125E-10	7.003E-10
WNW	1.573E-08	9.382E-09	6.713E-09	4.444E-09	3.305E-09	2.548E-09	1.996E-09	1.617E-09	1.346E-09	1.145E-09	9.903E-10
NW	1.460E-08	8.693E-09	6.214E-09	4.111E-09	3.095E-09	2.475E-09	2.033E-09	1.689E-09	1.414E-09	1.205E-09	1.044E-09
NNW	1.449E-08	9.105E-09	6.773E-09	4.705E-09	3.604E-09	2.852E-09	2.272E-09	1.845E-09	1.538E-09	1.308E-09	1.132E-09
N	1.947E-08	1.218E-08	8.947E-09	6.039E-09	4.544E-09	3.603E-09	2.930E-09	2.409E-09	2.003E-09	1.698E-09	1.463E-09
NNE	3.498E-08	2.034E-08	1.416E-08	8.828E-09	6.279E-09	4.802E-09	3.848E-09	3.186E-09	2.703E-09	2.335E-09	2.048E-09
NE	3.393E-08	1.990E-08	1.389E-08	8.667E-09	6.167E-09	4.718E-09	3.784E-09	3.135E-09	2.662E-09	2.303E-09	2.022E-09
ENE	3.028E-08	1.857E-08	1.330E-08	8.566E-09	6.224E-09	4.840E-09	3.935E-09	3.300E-09	2.833E-09	2.475E-09	2.193E-09
E	2.279E-08	1.403E-08	1.006E-08	6.474E-09	4.684E-09	3.619E-09	2.919E-09	2.427E-09	2.063E-09	1.784E-09	1.564E-09
ESE	2.397E-08	1.503E-08	1.096E-08	7.267E-09	5.388E-09	4.254E-09	3.498E-09	2.961E-09	2.559E-09	2.248E-09	2.001E-09
SE	2.104E-08	1.302E-08	9.385E-09	6.100E-09	4.458E-09	3.483E-09	2.841E-09	2.390E-09	2.056E-09	1.800E-09	1.597E-09
SSE	1.915E-08	1.182E-08	8.580E-09	5.734E-09	4.348E-09	3.534E-09	2.997E-09	2.611E-09	2.312E-09	2.067E-09	1.857E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
S	3.134E-07	9.818E-08	4.353E-08	2.673E-08	1.872E-08	9.930E-09	4.507E-09	2.584E-09	1.793E-09	1.366E-09
SSW	2.361E-07	8.172E-08	3.856E-08	2.384E-08	1.661E-08	8.551E-09	3.636E-09	1.954E-09	1.291E-09	9.447E-10
SW	2.877E-07	1.011E-07	4.589E-08	2.725E-08	1.845E-08	9.035E-09	3.567E-09	1.810E-09	1.150E-09	8.170E-10
WSW	2.750E-07	8.900E-08	3.792E-08	2.195E-08	1.482E-08	7.280E-09	2.880E-09	1.475E-09	9.434E-10	6.712E-10
W	3.446E-07	1.037E-07	4.198E-08	2.399E-08	1.598E-08	7.984E-09	3.392E-09	1.824E-09	1.160E-09	8.143E-10
WNW	3.782E-07	1.139E-07	4.749E-08	2.758E-08	1.857E-08	9.607E-09	4.442E-09	2.529E-09	1.622E-09	1.147E-09
NW	3.626E-07	1.043E-07	4.312E-08	2.516E-08	1.711E-08	8.905E-09	4.127E-09	2.464E-09	1.683E-09	1.207E-09
NNW	3.471E-07	9.783E-08	4.053E-08	2.408E-08	1.675E-08	9.265E-09	4.675E-09	2.820E-09	1.850E-09	1.311E-09
N	4.066E-07	1.223E-07	5.298E-08	3.217E-08	2.253E-08	1.236E-08	6.021E-09	3.585E-09	2.403E-09	1.701E-09
NNE	8.236E-07	2.358E-07	9.623E-08	5.799E-08	4.077E-08	2.085E-08	8.879E-09	4.814E-09	3.191E-09	2.338E-09
NE	6.477E-07	2.101E-07	9.405E-08	5.713E-08	3.959E-08	2.035E-08	8.716E-09	4.731E-09	3.140E-09	2.305E-09
ENE	4.193E-07	1.484E-07	7.500E-08	4.847E-08	3.483E-08	1.883E-08	8.576E-09	4.847E-09	3.303E-09	2.477E-09
E	3.100E-07	1.089E-07	5.517E-08	3.599E-08	2.610E-08	1.421E-08	6.475E-09	3.623E-09	2.429E-09	1.785E-09
ESE	3.631E-07	1.186E-07	5.795E-08	3.765E-08	2.739E-08	1.521E-08	7.254E-09	4.254E-09	2.961E-09	2.249E-09
SE	3.061E-07	1.027E-07	5.129E-08	3.334E-08	2.412E-08	1.319E-08	6.100E-09	3.486E-09	2.391E-09	1.800E-09
SSE	3.245E-07	1.070E-07	5.028E-08	3.142E-08	2.217E-08	1.201E-08	5.750E-09	3.536E-09	2.607E-09	2.062E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.495E-06	5.155E-07	2.958E-07	1.670E-07	8.398E-08	5.425E-08	3.911E-08	3.004E-08	2.407E-08	1.989E-08	1.682E-08
SSW	1.052E-06	3.756E-07	2.242E-07	1.332E-07	7.228E-08	4.835E-08	3.534E-08	2.725E-08	2.182E-08	1.797E-08	1.514E-08
SW	1.258E-06	4.527E-07	2.733E-07	1.670E-07	9.064E-08	5.901E-08	4.196E-08	3.160E-08	2.480E-08	2.009E-08	1.667E-08
WSW	1.266E-06	4.487E-07	2.600E-07	1.526E-07	7.816E-08	4.913E-08	3.419E-08	2.538E-08	1.972E-08	1.586E-08	1.325E-08
W	1.735E-06	5.743E-07	3.226E-07	1.822E-07	8.814E-08	5.389E-08	3.696E-08	2.723E-08	2.107E-08	1.690E-08	1.394E-08
WNW	2.017E-06	6.464E-07	3.512E-07	1.980E-07	9.781E-08	6.083E-08	4.223E-08	3.139E-08	2.447E-08	1.975E-08	1.637E-08
NW	1.966E-06	6.393E-07	3.364E-07	1.837E-07	8.905E-08	5.515E-08	3.831E-08	2.855E-08	2.232E-08	1.808E-08	1.510E-08
NNW	1.916E-06	6.115E-07	3.206E-07	1.723E-07	8.208E-08	5.098E-08	3.576E-08	2.695E-08	2.131E-08	1.743E-08	1.480E-08
N	2.081E-06	6.882E-07	3.794E-07	2.099E-07	1.037E-07	6.613E-08	4.729E-08	3.614E-08	2.886E-08	2.379E-08	2.021E-08
NNE	4.208E-06	1.393E-06	7.701E-07	4.161E-07	1.955E-07	1.206E-07	8.430E-08	6.342E-08	5.120E-08	4.275E-08	3.601E-08
NE	2.961E-06	1.050E-06	6.141E-07	3.535E-07	1.828E-07	1.186E-07	8.521E-08	6.506E-08	5.180E-08	4.254E-08	3.578E-08
ENE	1.952E-06	6.836E-07	3.953E-07	2.343E-07	1.327E-07	9.230E-08	6.959E-08	5.501E-08	4.497E-08	3.770E-08	3.224E-08
E	1.383E-06	5.096E-07	2.955E-07	1.738E-07	9.762E-08	6.789E-08	5.138E-08	4.083E-08	3.354E-08	2.825E-08	2.427E-08
ESE	1.792E-06	6.158E-07	3.413E-07	1.938E-07	1.041E-07	7.101E-08	5.334E-08	4.230E-08	3.477E-08	2.934E-08	2.528E-08
SE	1.499E-06	5.170E-07	2.874E-07	1.649E-07	9.094E-08	6.288E-08	4.747E-08	3.765E-08	3.090E-08	2.600E-08	2.232E-08
SSE	1.555E-06	5.367E-07	3.059E-07	1.763E-07	9.388E-08	6.263E-08	4.593E-08	3.561E-08	2.870E-08	2.380E-08	2.018E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.450E-08	8.725E-09	6.203E-09	3.995E-09	2.925E-09	2.302E-09	1.898E-09	1.615E-09	1.401E-09	1.236E-09	1.100E-09
SSW	1.299E-08	7.566E-09	5.227E-09	3.209E-09	2.259E-09	1.718E-09	1.373E-09	1.136E-09	9.613E-10	8.305E-10	7.271E-10
SW	1.412E-08	7.805E-09	5.201E-09	3.034E-09	2.056E-09	1.516E-09	1.181E-09	9.538E-10	7.905E-10	6.696E-10	5.761E-10
WSW	1.130E-08	6.202E-09	4.130E-09	2.418E-09	1.648E-09	1.220E-09	9.501E-10	7.608E-10	6.228E-10	5.200E-10	4.410E-10
W	1.175E-08	6.700E-09	4.608E-09	2.844E-09	1.966E-09	1.439E-09	1.097E-09	8.621E-10	6.987E-10	5.798E-10	4.903E-10
WNW	1.387E-08	8.200E-09	5.833E-09	3.826E-09	2.731E-09	2.032E-09	1.549E-09	1.224E-09	9.966E-10	8.307E-10	7.053E-10

NW	1.290E-08	7.611E-09	5.406E-09	3.563E-09	2.660E-09	2.064E-09	1.644E-09	1.334E-09	1.094E-09	9.154E-10	7.793E-10
NNW	1.283E-08	8.071E-09	6.013E-09	4.195E-09	3.115E-09	2.373E-09	1.844E-09	1.465E-09	1.196E-09	9.996E-10	8.503E-10
N	1.751E-08	1.098E-08	8.087E-09	5.494E-09	4.127E-09	3.175E-09	2.501E-09	2.012E-09	1.643E-09	1.371E-09	1.164E-09
NNE	3.096E-08	1.788E-08	1.238E-08	7.661E-09	5.426E-09	4.141E-09	3.316E-09	2.745E-09	2.320E-09	2.001E-09	1.749E-09
NE	3.069E-08	1.787E-08	1.240E-08	7.686E-09	5.453E-09	4.170E-09	3.348E-09	2.780E-09	2.359E-09	2.041E-09	1.791E-09
ENE	2.804E-08	1.712E-08	1.223E-08	7.874E-09	5.732E-09	4.475E-09	3.657E-09	3.085E-09	2.656E-09	2.330E-09	2.070E-09
E	2.120E-08	1.300E-08	9.298E-09	5.974E-09	4.327E-09	3.352E-09	2.714E-09	2.266E-09	1.935E-09	1.683E-09	1.483E-09
ESE	2.214E-08	1.386E-08	1.011E-08	6.709E-09	4.993E-09	3.962E-09	3.277E-09	2.791E-09	2.429E-09	2.150E-09	1.926E-09
SE	1.948E-08	1.202E-08	8.643E-09	5.612E-09	4.109E-09	3.221E-09	2.640E-09	2.232E-09	1.930E-09	1.699E-09	1.513E-09
SSE	1.744E-08	1.072E-08	7.765E-09	5.200E-09	3.969E-09	3.257E-09	2.792E-09	2.448E-09	2.147E-09	1.892E-09	1.675E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.874E-07	8.922E-08	3.952E-08	2.418E-08	1.687E-08	8.888E-09	4.010E-09	2.307E-09	1.614E-09	1.234E-09
SSW	2.174E-07	7.519E-08	3.557E-08	2.190E-08	1.518E-08	7.731E-09	3.235E-09	1.724E-09	1.137E-09	8.310E-10
SW	2.659E-07	9.354E-08	4.236E-08	2.495E-08	1.674E-08	8.051E-09	3.081E-09	1.526E-09	9.565E-10	6.708E-10
WSW	2.542E-07	8.179E-08	3.465E-08	1.987E-08	1.330E-08	6.413E-09	2.456E-09	1.226E-09	7.623E-10	5.212E-10
W	3.161E-07	9.381E-08	3.758E-08	2.124E-08	1.401E-08	6.893E-09	2.846E-09	1.443E-09	8.668E-10	5.819E-10
WNW	3.487E-07	1.036E-07	4.286E-08	2.465E-08	1.645E-08	8.408E-09	3.785E-09	2.025E-09	1.230E-09	8.334E-10
NW	3.359E-07	9.502E-08	3.890E-08	2.248E-08	1.517E-08	7.806E-09	3.571E-09	2.055E-09	1.331E-09	9.180E-10
NNW	3.193E-07	8.831E-08	3.630E-08	2.144E-08	1.485E-08	8.213E-09	4.119E-09	2.359E-09	1.471E-09	1.003E-09
N	3.727E-07	1.106E-07	4.785E-08	2.901E-08	2.027E-08	1.115E-08	5.463E-09	3.159E-09	2.011E-09	1.375E-09
NNE	7.513E-07	2.112E-07	8.562E-08	5.147E-08	3.614E-08	1.834E-08	7.716E-09	4.154E-09	2.746E-09	2.002E-09
NE	5.953E-07	1.922E-07	8.606E-08	5.206E-08	3.590E-08	1.828E-08	7.740E-09	4.183E-09	2.782E-09	2.043E-09
ENE	3.878E-07	1.373E-07	6.981E-08	4.507E-08	3.230E-08	1.738E-08	7.891E-09	4.483E-09	3.085E-09	2.330E-09
E	2.890E-07	1.013E-07	5.156E-08	3.361E-08	2.431E-08	1.318E-08	5.981E-09	3.357E-09	2.268E-09	1.684E-09
ESE	3.367E-07	1.093E-07	5.364E-08	3.485E-08	2.532E-08	1.403E-08	6.702E-09	3.963E-09	2.792E-09	2.149E-09
SE	2.840E-07	9.491E-08	4.765E-08	3.096E-08	2.236E-08	1.218E-08	5.617E-09	3.225E-09	2.233E-09	1.699E-09
SSE	2.996E-07	9.830E-08	4.626E-08	2.881E-08	2.024E-08	1.090E-08	5.223E-09	3.261E-09	2.432E-09	1.887E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	DISTANCES IN MILES										
S	1.686E-08	8.051E-09	5.067E-09	2.798E-09	1.135E-09	6.278E-10	3.993E-10	2.765E-10	2.026E-10	1.546E-10	1.216E-10
SSW	1.316E-08	6.443E-09	4.160E-09	2.351E-09	9.760E-10	5.470E-10	3.508E-10	2.442E-10	1.795E-10	1.372E-10	1.080E-10
SW	1.725E-08	8.478E-09	5.696E-09	3.248E-09	1.363E-09	7.667E-10	4.927E-10	3.434E-10	2.525E-10	1.931E-10	1.521E-10
WSW	2.019E-08	1.033E-08	6.498E-09	3.546E-09	1.422E-09	7.750E-10	4.880E-10	3.358E-10	2.451E-10	1.867E-10	1.522E-10
W	2.785E-08	1.366E-08	8.194E-09	4.562E-09	1.782E-09	9.363E-10	5.739E-10	3.876E-10	2.795E-10	2.111E-10	1.652E-10
WNW	2.835E-08	1.480E-08	9.606E-09	5.006E-09	1.911E-09	1.006E-09	6.187E-10	4.194E-10	3.034E-10	2.300E-10	1.805E-10
NW	2.615E-08	1.417E-08	8.852E-09	4.744E-09	1.772E-09	9.294E-10	5.710E-10	3.872E-10	2.805E-10	2.129E-10	1.675E-10
NNW	2.258E-08	1.175E-08	7.219E-09	3.748E-09	1.385E-09	7.254E-10	4.455E-10	3.021E-10	2.189E-10	1.662E-10	1.326E-10
N	2.314E-08	1.122E-08	6.940E-09	3.651E-09	1.387E-09	7.372E-10	4.570E-10	3.115E-10	2.262E-10	1.718E-10	1.350E-10
NNE	5.031E-08	2.298E-08	1.382E-08	7.254E-09	2.776E-09	1.477E-09	9.164E-10	6.246E-10	4.532E-10	3.478E-10	2.728E-10
NE	4.297E-08	2.033E-08	1.279E-08	7.090E-09	2.899E-09	1.607E-09	1.023E-09	7.090E-10	5.196E-10	3.964E-10	3.118E-10
ENE	2.496E-08	1.315E-08	8.603E-09	4.843E-09	1.982E-09	1.107E-09	7.092E-10	4.936E-10	3.629E-10	2.777E-10	2.189E-10
E	2.071E-08	1.147E-08	7.499E-09	4.157E-09	1.658E-09	9.153E-10	5.820E-10	4.034E-10	2.961E-10	2.264E-10	1.786E-10
ESE	2.303E-08	1.263E-08	8.144E-09	4.444E-09	1.741E-09	9.499E-10	5.995E-10	4.137E-10	3.029E-10	2.313E-10	1.824E-10
SE	1.963E-08	1.083E-08	7.004E-09	3.836E-09	1.508E-09	8.253E-10	5.220E-10	3.606E-10	2.642E-10	2.018E-10	1.592E-10
SSE	1.920E-08	1.009E-08	6.506E-09	3.598E-09	1.442E-09	7.957E-10	5.058E-10	3.504E-10	2.570E-10	1.964E-10	1.548E-10

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
	DISTANCES IN MILES										
S	9.806E-11	4.663E-11	2.858E-11	1.510E-11	9.602E-12	6.883E-12	5.292E-12	4.267E-12	3.824E-12	3.584E-12	4.441E-12
SSW	8.711E-11	4.152E-11	2.560E-11	1.337E-11	8.481E-12	6.055E-12	4.632E-12	3.713E-12	3.089E-12	2.615E-12	2.369E-12
SW	1.226E-10	5.914E-11	3.592E-11	1.882E-11	1.185E-11	8.397E-12	6.361E-12	5.037E-12	4.136E-12	3.465E-12	3.046E-12
WSW	1.226E-10	5.785E-11	3.480E-11	1.810E-11	1.148E-11	8.187E-12	7.718E-12	7.168E-12	5.796E-12	4.697E-12	3.813E-12
W	1.329E-10	6.210E-11	3.764E-11	2.490E-11	2.010E-11	1.404E-11	9.906E-12	7.475E-12	5.814E-12	4.646E-12	3.794E-12
WNW	1.457E-10	6.989E-11	4.237E-11	3.565E-11	2.512E-11	1.624E-11	1.193E-11	8.965E-12	6.972E-12	5.577E-12	4.552E-12
NW	1.354E-10	6.496E-11	4.018E-11	2.164E-11	2.339E-11	1.767E-11	1.257E-11	8.770E-12	6.840E-12	5.439E-12	4.442E-12
NNW	1.071E-10	5.107E-11	3.151E-11	2.377E-11	2.411E-11	1.482E-11	1.045E-11	7.888E-12	6.138E-12	4.906E-12	4.002E-12
N	1.090E-10	5.266E-11	3.239E-11	1.737E-11	2.427E-11	2.053E-11	1.351E-11	9.541E-12	7.426E-12	5.936E-12	4.848E-12
NNE	2.197E-10	1.043E-10	6.361E-11	3.345E-11	2.139E-11	1.544E-11	1.194E-11	9.687E-12	8.120E-12	6.958E-12	6.095E-12
NE	2.513E-10	1.183E-10	7.318E-11	3.841E-11	2.434E-11	1.740E-11	1.324E-11	1.059E-11	8.756E-12	7.407E-12	6.401E-12
ENE	1.767E-10	8.391E-11	5.184E-11	2.753E-11	1.755E-11	1.274E-11	9.794E-12	7.956E-12	6.641E-12	5.700E-12	4.981E-12
E	1.443E-10	6.879E-11	4.256E-11	2.277E-11	1.453E-11	1.068E-11	8.220E-12	6.528E-12	5.310E-12	4.401E-12	3.703E-12
ESE	1.474E-10	7.026E-11	4.351E-11	2.334E-11	1.493E-11	1.101E-11	8.497E-12	6.767E-12	5.521E-12	4.572E-12	3.865E-12
SE	1.287E-10	6.135E-11	3.799E-11	2.039E-11	1.303E-11	9.594E-12	7.417E-12	5.989E-12	4.905E-12	4.284E-12	3.776E-12
SSE	1.250E-10	5.954E-11	3.689E-11	1.966E-11	1.264E-11	9.098E-12	7.207E-12	9.109E-12	9.610E-12	7.686E-12	6.242E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 6-26-2008 17:20

Fermi COL B

Turbine Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES									
S	4.722E-09	1.279E-09	4.111E-10	2.054E-10	1.227E-10	5.003E-11	1.565E-11	6.972E-12	4.391E-12	3.972E-12
SSW	3.863E-09	1.091E-09	3.605E-10	1.819E-10	1.089E-10	4.457E-11	1.392E-11	6.133E-12	3.738E-12	2.664E-12
SW	5.226E-09	1.517E-09	5.060E-10	2.558E-10	1.533E-10	6.292E-11	1.952E-11	8.504E-12	5.072E-12	3.508E-12
WSW	6.039E-09	1.606E-09	5.037E-10	2.488E-10	1.515E-10	6.200E-11	1.887E-11	8.876E-12	6.802E-12	4.695E-12
W	7.794E-09	2.024E-09	5.960E-10	2.843E-10	1.669E-10	6.697E-11	2.560E-11	1.400E-11	7.537E-12	4.676E-12
WNW	8.717E-09	2.197E-09	6.423E-10	3.086E-10	1.823E-10	7.450E-11	3.246E-11	1.689E-11	9.054E-12	5.611E-12
NW	8.208E-09	2.058E-09	5.930E-10	2.852E-10	1.691E-10	6.960E-11	2.654E-11	1.716E-11	9.122E-12	5.485E-12
NNW	6.683E-09	1.617E-09	4.628E-10	2.226E-10	1.331E-10	5.483E-11	2.564E-11	1.555E-11	7.954E-12	4.936E-12
N	6.429E-09	1.602E-09	4.735E-10	2.299E-10	1.363E-10	5.617E-11	2.378E-11	1.872E-11	9.870E-12	5.975E-12
NNE	1.294E-08	3.194E-09	9.492E-10	4.621E-10	2.754E-10	1.119E-10	3.479E-11	1.563E-11	9.734E-12	6.983E-12
NE	1.193E-08	3.256E-09	1.053E-09	5.268E-10	3.145E-10	1.278E-10	3.988E-11	1.759E-11	1.065E-11	7.434E-12
ENE	7.943E-09	2.229E-09	7.291E-10	3.678E-10	2.207E-10	9.029E-11	2.850E-11	1.284E-11	7.980E-12	5.713E-12
E	6.896E-09	1.883E-09	5.994E-10	3.002E-10	1.801E-10	7.392E-11	2.350E-11	1.072E-11	6.547E-12	4.412E-12

```
  ESE 7.497E-09 1.990E-09 6.186E-10 3.073E-10 1.839E-10 7.552E-11 2.408E-11 1.105E-11 6.787E-12 4.591E-12
   SE 6.445E-09 1.722E-09 5.383E-10 2.680E-10 1.605E-10 6.594E-11 2.103E-11 9.641E-12 5.984E-12 4.280E-12
  SSE 6.009E-09 1.634E-09 5.210E-10 2.606E-10 1.561E-10 6.402E-11 2.037E-11 9.287E-12 8.756E-12 7.721E-12

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   71.30                    REP. WIND HEIGHT       (METERS)       71.3
     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)      /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                  /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556             /      ELEVATED        LESS THAN  1.332              LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780  /      MIXED           BETWEEN    1.332 AND  6.659   BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780             /      GROUND LEVEL    ABOVE      6.659              ABOVE     10.881
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE:  6-26-2008    17:20

0Fermi COL B

0Turbine Bldg Stack
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS
 SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF  DIRECTION DIST.  X/Q       X/Q       X/Q       D/Q
  ID    LOCATION FROM SITE (MI) (SEC/M3)  (SEC/M3)  (SEC/M3) (PER SQ.METER)
                 NO DECAY
+                              2.260 DAY DECAY
+                                          8.000 DAY DECAY
                 UNDEPLETED      UNDEPLETED        DEPLETED
     Meat  Cow    NNW   3.05   3.0E-08   2.9E-08   2.6E-08   2.9E-10
     Meat  Cow    NNE   4.50   4.1E-08   4.1E-08   3.6E-08   2.7E-10
     Milk Cow     WNW   2.18   5.8E-08   5.8E-08   5.3E-08   8.3E-10
     Milk Cow      NW   3.65   2.4E-08   2.3E-08   2.1E-08   2.6E-10

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   71.30                    REP. WIND HEIGHT       (METERS)       71.3
     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)      /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                  /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556             /      ELEVATED        LESS THAN  1.332              LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780  /      MIXED           BETWEEN    1.332 AND  6.659   BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780             /      GROUND LEVEL    ABOVE      6.659              ABOVE     10.881
```

11/23/2009

Staff's XOQDOQ Runs

- Compares applicant's original results with staff's runs using staff generated JFD from original met data
- original receptor distances

JFD

			RB/FB Vent Stack			TB Vent Stack			RWB Vent Stack		
			Applicant	Staff	Ratio	Applicant	Staff	Ratio	Applicant	Staff	Ratio
Site Boundary	χ/Q	undepleted/no decay	5.0E-07	5.0E-07	1.00	5.5E-07	5.4E-07	0.98	9.3E-06	1.0E-05	1.08
		undepleted/decay	5.0E-07	5.0E-07	1.00	5.5E-07	5.4E-07	0.98	9.3E-06	1.0E-05	1.08
		depleted/decay	4.7E-07	4.7E-07	1.00	5.1E-07	5.0E-07	0.98	8.3E-06	9.0E-06	1.08
	D/Q		1.4E-08	1.4E-08	1.00	1.3E-08	1.3E-08	1.00	3.5E-08	3.5E-08	1.00
Nearest Resident	χ/Q	undepleted/no decay	3.8E-07	3.7E-07	0.97	4.0E-07	3.9E-07	0.98	4.9E-06	4.5E-06	0.92
		undepleted/decay	3.8E-07	3.7E-07	0.97	4.0E-07	3.9E-07	0.98	4.9E-06	4.5E-06	0.92
		depleted/decay	3.6E-07	3.4E-07	0.94	3.7E-07	3.6E-07	0.97	4.3E-06	4.0E-06	0.93
	D/Q		1.1E-08	9.9E-09	0.90	9.9E-09	9.4E-09	0.95	2.5E-08	2.4E-08	0.96
Nearest Meat Animal	χ/Q	undepleted/no decay	4.8E-08	4.8E-08	1.00	4.1E-08	4.1E-08	1.00	1.9E-07	2.0E-07	1.05
		undepleted/decay	4.7E-08	4.8E-08	1.02	4.1E-08	4.1E-08	1.00	1.9E-07	1.9E-07	1.00
		depleted/decay	4.3E-08	4.4E-08	1.02	3.6E-08	3.6E-08	1.00	1.4E-07	1.5E-07	1.07
	D/Q		3.0E-10	2.9E-10	0.97	2.9E-10	2.8E-10	0.97	6.0E-10	6.0E-10	1.00
Nearest Garden	χ/Q	undepleted/no decay	3.8E-07	3.8E-07	1.00	4.0E-07	3.9E-07	0.98	4.6E-06	4.5E-06	0.98
		undepleted/decay	3.8E-07	3.8E-07	1.00	4.0E-07	3.9E-07	0.98	4.6E-06	4.5E-06	0.98
		depleted/decay	3.6E-07	3.6E-07	1.00	3.7E-07	3.6E-07	0.97	4.1E-06	4.0E-06	0.98
	D/Q		1.1E-08	1.1E-08	1.00	9.8E-09	9.4E-09	0.96	2.5E-08	2.4E-08	0.96
Nearest Milk Cow	χ/Q	undepleted/no decay	6.7E-08	6.6E-08	0.99	5.8E-08	5.7E-08	0.98	3.0E-07	3.0E-07	1.00
		undepleted/decay	6.6E-08	6.6E-08	1.00	5.8E-08	5.7E-08	0.98	2.9E-07	3.0E-07	1.03
		depleted/decay	6.1E-08	6.1E-08	1.00	5.3E-08	5.2E-08	0.98	2.4E-07	2.5E-07	1.04
	D/Q		8.7E-10	8.4E-10	0.97	8.3E-10	8.0E-10	0.96	1.5E-09	1.5E-09	1.00
Nearest Milk Goat	χ/Q	undepleted/no decay	6.1E-08	6.1E-08	1.00	5.4E-08	5.3E-08	0.98	2.6E-07	2.7E-07	1.04
		undepleted/decay	6.1E-08	6.1E-08	1.00	5.3E-08	5.2E-08	0.98	2.6E-07	2.7E-07	1.04
		depleted/decay	5.6E-08	5.6E-08	1.00	4.8E-08	4.7E-08	0.98	2.2E-07	2.2E-07	1.00
	D/Q		7.7E-10	7.5E-10	0.97	7.4E-10	7.1E-10	0.96	1.4E-09	1.3E-09	0.93
				Max	1.02		Max	1.00		Max	1.08
				Min	0.90		Min	0.95		Min	0.92

```
10101111000
Fermi COL A (with Staff JFD)
   11    7    6   15    5    3    0
  10. 101. 2.26  -8.   0.
   66    4    6   68  127  128   65
    3    0    5   15    2    2    1    4    3    3    4    6   18   14    9    4
   21   19   16   19    7   15   12   14   16   14   20   37   34   52   40   17
   30   32   39   30   41   49   61   49   55   61   52   68   98  102   89   47
   86   79  132  131  136  357  493  307  275  250  174  198  252  295  267  194
   96   58  150  170  174  330  412  323  189  337  184  223  182  245  222  159
   54   44   52  111  153  168   75   69   49  185  142  120   93   93   87   97
   20    9   12   40  107   63    9   13    7   66  100   32   36   39   33   39
   21   12    5   27   67   21    1    2    2   28   42    8   12   17   12   17
    0    0    0    0    4    0    0    0    0    6    5    0    0    0    0    0
    0    0    0    0    2    0    0    0    0    0    0    0    0    0    0    0
    3    1    1    1    0    0    0    2    2    3    1    2    3    5    1    1
    6    2    2    1    1    3    4    4    2    6    3   17   14   12   15    7
    8    8    6    4    2    4   18    5   12    9    6   16   22   18   19   18
   27   17   20   16   19   37   42   36   24   43   48   63   42   50   51   39
   18   24   20   22   18   23   26   36   23   57   83   78   43   28   26   26
   15   11   15   21   21   16    5    7    8   40   55   27   19   14   10   21
    9    5    5   10   18    5    2    1    1   21   45   10    6    7    5    4
    4    2    1   10   10    3    1    0    0   11   29    3    2    9    3    2
    0    0    0    0    0    0    0    0    0    1    4    0    0    0    0    0
    0    0    0    0    0    0    0    0    0    0    1    0    0    0    0    0
    3    2    3    2    0    0    0    1    2    4    4    0    8    7    4    3
    3    8    3    6    2    2    3    7    4    6    8   10   13   16   13    5
    9   16   11    7    5   13   10    7    7   20   24   31   21   17   20   15
   38   32   26   18   17   31   28   40   38   38   60   74   55   45   40   54
   21   17   37   38   20   24   24   17   14   60   80   69   39   34   27   36
   22   11   12   38   16   15    9    6    7   39   57   33   28   20   14   14
   12   20    9   22   11   15    3    3    5   25   40   12   26   12    4    9
    3    8    7   16   16    6    2    0    0   19   50    7    4    5    3    4
    0    1    0    3    1    0    0    0    0    0    8    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    1    0    0    0    0    0
   20   18   18    4    4    5    9    6   14   25   27   49   60   58   39   32
   63   57   30   16   16   23   17   22   38   32   69  119  103  116   95   73
   79  112   64   30   27   51   40   49   59   60  146  253  186  132  166  119
  156  192  310  152  129  192  192  130  181  247  475  510  341  324  295  331
  166  122  371  254  205  194  177  111  177  320  502  360  241  189  175  224
  167  106  223  222  157  139   75   66  104  333  442  159  114  113   85   88
   82  100   95  100  126   52   14   19   34  173  315   53   50   79   24   51
   56   40   17   83  100   43   12    5   10  120  197   39   14   25    8   20
    5   16    2    5   25    1    4    2    0    3   39    4    1    0    0    0
    0    0    0    0    1    0    0    0    0    0    1    0    0    0    0    0
   50   31   22   17   14   15   15   21   48   53   83  142  138  154  109   58
   86   87   44   25   20   42   32   44   81   98  208  326  221  264  220  121
  100  159   43   41   52   68   55   79  136  159  290  284  166  184  234  180
  186  181  243  156  156  214  216  219  301  579  375  229  162  151  162  234
   99   67  144  133  131  191  151  143  215  486  179   57   55   72   55   63
   35   19   31   59   68   54   59   72  106  277   89   21   16   21   19   20
   16    3    9   17   61   37   13   20   36  107   57    3    5    6    6    9
    7    2    0    6   43   19    5    0   15   67   30    2    2    4    3    7
    0    0    0    4   12    2    0    2    1    2    4    0    1    1    0    0
    0    0    0    0    2    0    0    0    0    0    0    0    0    1    0    0
   40   27   13    8    8   11   12   35   60   70  105  150  191  195  127   62
   69   36   16    9   10   11   12   35   75  107  163  211  117  208  144   99
   99   48    8    6   11   34   37   41   57   93  105   53   39   71   52   73
  106   39   12   12   35   59   71  105   86  170   35    9    8   17   14   49
   12   10    5   14   28   35   38   69   62  113   18    5    6    2    6    4
    7    2    0    7   10   12   22   22   38   72    5    2    1    4    2    6
    2    0    0    1    7    2    9    9   21   17    1    2    0    1    0    0
    0    0    0    0   10    3    2    5    5   10    1    6    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    1    0    0    0
    0    0    0    0    0    0    0    0    0    0    0    0    1    0    0    0
   19   10    4    2    1    9    6    7   14   21   42  102  200  267  123   63
   44   15    6    3    3   12   17   10    9   42   36   83   70  219   99   69
   30    3    0    3    8   20   28   15   11   29   20   23    6   26   10   37
   24   10    2    3   10   31   49   39   21   29   11    2    2    3    3   21
    2    0    0    1   14   19   20   26    8   18    5    1    0    1    0    0
    1    0    0    0    6    9   14   11    5   11    7    4    0    0    0    0
    0    0    0    0    1    1    5    5    0    2    1    1    0    0    0    0
    0    0    0    0    0    1    1    2    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  -1. 0.34  1.0  1.5  2.0  3.0  4.0  5.0  6.0  8.0 10.0 20.0
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
```

```
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
80467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
   12   11    9    2    2
Site Boundary
    1 1131    2 1156    3 1447    4 1281    5  943    6  919    7  919    8  919
    9 1059   10 1531   11 2054   16 1131
Residence
   16 1478    2 1442    3 1606    4 1821    5 1571    7 1107    7 1714    8 1920
   10 2130   10 2109   11 2182
Garden
    1 2067    4 3445    5 2422    7 1110    8 1757    8 2355    9 3716   10 3477
   11 3602
Sheep
    8 7173   10 7238
Goat
    6 3704    8 4961
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

```
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    10:31

 PRINTOUT OF INPUT CARDS
0    1     10101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL A (with Staff JFD)
     3        11    7    6   15    5    3    0
     4       10.00 101.00   2.26  -8.00    .00
     5      66.000  4.000  6.000 68.000127.000128.000 65.000
     6       3.000   .000  5.000 15.000  2.000  2.000  1.000  4.000  3.000  3.000  4.000  6.000 18.000 14.000  9.000  4.000
     6      21.000 19.000 16.000 19.000  7.000 15.000 12.000 14.000 16.000 14.000 20.000 37.000 34.000 52.000 40.000 17.000
     6      30.000 32.000 39.000 30.000 41.000 49.000 61.000 49.000 55.000 61.000 52.000 68.000 98.000102.000 89.000 47.000
     6      86.000 79.000132.000131.000136.000357.000493.000307.000275.000250.000174.000198.000252.000295.000267.000194.000
     6      96.000 58.000150.000170.000174.000330.000412.000323.000189.000337.000184.000223.000182.000245.000222.000159.000
     6      54.000 44.000 52.000111.000153.000168.000 75.000 69.000 49.000185.000142.000120.000 93.000 93.000 87.000 97.000
     6      20.000  9.000 12.000 40.000107.000 63.000  9.000 13.000  7.000 66.000100.000 32.000 36.000 39.000 33.000 39.000
     6      21.000 12.000  5.000 27.000 67.000 21.000  1.000  2.000  2.000 28.000 42.000  8.000 12.000 17.000 12.000 17.000
     6        .000   .000   .000   .000  4.000   .000   .000   .000   .000  6.000  5.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6       3.000  1.000  1.000  1.000   .000   .000   .000  2.000  2.000  3.000  1.000  2.000  3.000  5.000  1.000  1.000
     6       6.000  2.000  2.000  1.000  1.000  3.000  4.000  4.000  2.000  6.000  3.000 17.000 14.000 12.000 15.000  7.000
     6       8.000  8.000  6.000  4.000  2.000  4.000 18.000  5.000 12.000  9.000  6.000 16.000 22.000 18.000 19.000 18.000
     6      27.000 17.000 20.000 16.000 19.000 37.000 42.000 36.000 24.000 43.000 48.000 63.000 42.000 50.000 51.000 39.000
     6      18.000 24.000 20.000 22.000 18.000 23.000 26.000 36.000 23.000 57.000 83.000 78.000 43.000 28.000 26.000 26.000
     6      15.000 11.000 15.000 21.000 21.000 16.000  5.000  7.000  8.000 40.000 55.000 27.000 19.000 14.000 10.000 21.000
     6       9.000  5.000  5.000 10.000 18.000  5.000  2.000  1.000  1.000 21.000 45.000 10.000  6.000  7.000  5.000  4.000
     6       4.000  2.000  1.000 10.000 10.000  3.000  1.000   .000   .000 11.000 29.000  3.000  2.000  9.000  3.000  2.000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6       3.000  2.000  3.000  2.000   .000   .000   .000  1.000  2.000  4.000  4.000   .000  8.000  7.000  4.000  3.000
     6       3.000  8.000  3.000  6.000  2.000  2.000  3.000  7.000  4.000  6.000  8.000 10.000 13.000 16.000 13.000  5.000
     6       9.000 16.000 11.000  7.000  5.000 13.000 10.000  7.000  7.000 20.000 24.000 31.000 21.000 17.000 20.000 15.000
     6      38.000 32.000 26.000 18.000 17.000 31.000 28.000 40.000 38.000 38.000 60.000 74.000 55.000 45.000 40.000 54.000
     6      21.000 17.000 37.000 38.000 20.000 24.000 24.000 17.000 14.000 60.000 80.000 69.000 39.000 34.000 27.000 36.000
     6      22.000 11.000 12.000 38.000 16.000 15.000  9.000  6.000  7.000 39.000 57.000 33.000 28.000 20.000 14.000 14.000
     6      12.000 20.000  9.000 22.000 11.000 15.000  3.000  3.000  5.000 25.000 40.000 12.000 26.000 12.000  4.000  9.000
     6       3.000  8.000  7.000 16.000 16.000  6.000  2.000   .000   .000 19.000 50.000  7.000  4.000  5.000  3.000  4.000
     6        .000  1.000   .000  3.000  1.000   .000   .000   .000   .000   .000  8.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6      20.000 18.000 18.000  4.000  4.000  5.000  9.000  6.000 14.000 25.000 27.000 49.000 60.000 58.000 39.000 32.000
     6      63.000 57.000 30.000 16.000 16.000 23.000 17.000 22.000 38.000 32.000 69.000119.000103.000116.000 95.000 73.000
     6      79.000112.000 64.000 30.000 27.000 51.000 40.000 49.000 59.000 60.000146.000253.000186.000132.000166.000119.000
     6     156.000192.000310.000152.000129.000192.000192.000130.000181.000247.000475.000510.000341.000324.000295.000331.000
     6     166.000122.000371.000254.000205.000194.000177.000111.000177.000320.000502.000360.000241.000189.000175.000224.000
     6     167.000106.000223.000222.000157.000139.000 75.000 66.000104.000333.000442.000159.000114.000113.000 85.000 88.000
     6      82.000100.000 95.000100.000126.000 52.000 14.000 19.000 34.000173.000315.000 53.000 50.000 79.000 24.000 51.000
     6      56.000 40.000 17.000 83.000100.000 43.000 12.000  5.000 10.000120.000197.000 39.000 14.000 25.000  8.000 20.000
     6       5.000 16.000  2.000  5.000 25.000  1.000  4.000  2.000   .000  3.000 39.000  4.000  1.000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6      50.000 31.000 22.000 17.000 14.000 15.000 15.000 21.000 48.000 53.000 83.000142.000138.000154.000109.000 58.000
     6      86.000 87.000 44.000 25.000 20.000 42.000 32.000 44.000 81.000 98.000208.000326.000221.000264.000220.000121.000
     6     100.000159.000 43.000 41.000 52.000 68.000 55.000 79.000136.000159.000290.000284.000166.000184.000234.000180.000
     6     186.000181.000243.000156.000156.000214.000216.000219.000301.000579.000375.000229.000162.000151.000162.000234.000
     6      99.000 67.000144.000133.000131.000191.000151.000143.000215.000486.000179.000 57.000 55.000 72.000 55.000 63.000
     6      35.000 19.000 31.000 59.000 68.000 54.000 59.000 72.000106.000277.000 89.000 21.000 16.000 21.000 19.000 20.000
     6      16.000  3.000  9.000 17.000 61.000 37.000 13.000 20.000 36.000107.000 57.000  3.000  5.000  6.000  6.000  9.000
     6       7.000  2.000   .000  6.000 43.000 19.000  5.000   .000 15.000 67.000 30.000  2.000  2.000  4.000  3.000  7.000
     6        .000   .000   .000  4.000 12.000  2.000   .000  2.000  1.000  2.000  4.000   .000  1.000  1.000   .000   .000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000
     6      40.000 27.000 13.000  8.000  8.000 11.000 12.000 35.000 60.000 70.000105.000150.000191.000195.000127.000 62.000
     6      69.000 36.000 16.000  9.000 10.000 11.000 12.000 35.000 75.000107.000163.000211.000117.000208.000144.000 99.000
     6      99.000 48.000  8.000  6.000 11.000 34.000 37.000 41.000 57.000 93.000105.000 53.000 39.000 71.000 52.000 73.000
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    6     106.000 39.000 12.000 12.000 35.000 59.000 71.000105.000 86.000170.000 35.000  9.000  8.000 17.000 14.000 49.000
    6      12.000 10.000  5.000 14.000 28.000 35.000 38.000 69.000 62.000113.000 18.000  5.000  6.000  2.000  6.000  4.000
    6       7.000  2.000   .000  7.000 10.000 12.000 22.000 22.000 38.000 72.000  5.000  2.000  1.000  4.000  2.000  6.000
    6       2.000   .000   .000  1.000  7.000  2.000  9.000  9.000 21.000 17.000  1.000  2.000   .000  1.000   .000   .000
    6        .000   .000   .000   .000 10.000  3.000  2.000  5.000  5.000 10.000  1.000  6.000  1.000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  1.000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000   .000
    6      19.000 10.000  4.000  2.000  1.000  9.000  6.000  7.000 14.000 21.000 42.000102.000200.000267.000123.000 63.000
    6      44.000 15.000  6.000  3.000  3.000 12.000 17.000 10.000  9.000 42.000 36.000 83.000 70.000219.000 99.000 69.000
    6      30.000  3.000   .000  3.000  8.000 20.000 28.000 15.000 11.000 29.000 20.000 23.000  6.000 26.000 10.000 37.000
    6      24.000 10.000  2.000  3.000 10.000 31.000 49.000 39.000 21.000 29.000 11.000  2.000  2.000  3.000  3.000 21.000
    6       2.000   .000   .000  1.000 14.000 19.000 20.000 26.000  8.000 18.000  5.000  1.000   .000  1.000   .000   .000
    6       1.000   .000   .000   .000  6.000  9.000 14.000 11.000  5.000 11.000  7.000  4.000   .000   .000   .000   .000
    6        .000   .000   .000   .000  1.000  1.000  5.000  5.000   .000  2.000  1.000  1.000   .000   .000   .000   .000
    6        .000   .000   .000   .000   .000  1.000  1.000  2.000   .000   .000   .000   .000   .000   .000   .000   .000
    6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    7         -1.   .340  1.000  1.500  2.000  3.000  4.000  5.000  6.000  8.000 10.000 20.000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
   10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
   10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
   11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
   10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
   11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
   12         12   11    9    2    2
   13     Site Boundary
   14       1 1131.0  2 1156.0  3 1447.0  4 1281.0  5  943.0  6  919.0  7  919.0  8  919.0

  9 1059.0 10 1531.0 11 2054.0 16 1131.0
   13     Residence
   14      16 1478.0  2 1442.0  3 1606.0  4 1821.0  5 1571.0  7 1107.0  7 1714.0  8 1920.0

 10 2130.0 10 2109.0 11 2182.0
   13     Garden
   14       1 2067.0  4 3445.0  5 2422.0  7 1110.0  8 1757.0  8 2355.0  9 3716.0 10 3477.0

 11 3602.0
   13     Sheep
   14       8 7173.0 10 7238.0
   13     Goat
   14       6 3704.0  8 4961.0
   15     Ground Level/Radwaste Bldg
   16        .000   .000   10.0     .0  350.0   10.0   .00
   17         0    0    0
   15     Reactor Bldg/Fuel Bldg Stack
   16      17.780  2.400   52.6   48.0     .0   52.6   .00
   17         0    0    0
   15     Turbine Bldg Stack
   16      17.780  1.950   71.3   52.0     .0   71.3   .00
   17         0    0    0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    10:31

    Fermi COL A (with Staff JFD)
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0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS A

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.000	.007	.021	.003	.003	.001	.006	.004	.004	.006	.008	.025	.019	.012	.006	.129
1.00	.006	.000	.010	.029	.004	.004	.002	.008	.006	.006	.008	.012	.035	.027	.018	.008	.181
1.50	.041	.037	.031	.037	.014	.029	.023	.027	.031	.027	.039	.072	.066	.101	.078	.033	.688
2.00	.058	.062	.076	.058	.080	.095	.119	.095	.107	.119	.101	.133	.191	.199	.173	.092	1.760
3.00	.168	.154	.257	.255	.265	.696	.961	.598	.536	.487	.339	.386	.491	.575	.520	.378	7.067
4.00	.187	.113	.292	.331	.339	.643	.803	.629	.368	.657	.359	.435	.355	.477	.433	.310	6.731
5.00	.105	.086	.101	.216	.298	.327	.146	.134	.095	.361	.277	.234	.181	.181	.170	.189	3.103
6.00	.039	.018	.023	.078	.209	.123	.018	.025	.014	.129	.195	.062	.070	.076	.064	.076	1.218
8.00	.041	.023	.010	.053	.131	.041	.002	.004	.004	.055	.082	.016	.023	.033	.023	.033	.573
10.00	.000	.000	.000	.000	.008	.000	.000	.000	.000	.012	.010	.000	.000	.000	.000	.000	.029
20.00	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004
TOTAL	.65	.49	.81	1.08	1.35	1.96	2.07	1.53	1.17	1.86	1.41	1.36	1.44	1.69	1.49	1.12	21.48

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.001	.000	.000	.000	.000	.000	.000	.001	.001	.001	.000	.001	.001	.001	.000	.000	.008
1.00	.006	.002	.002	.002	.000	.000	.000	.004	.004	.006	.002	.004	.006	.010	.002	.002	.051
1.50	.012	.004	.004	.002	.002	.006	.008	.008	.004	.012	.006	.033	.027	.023	.029	.014	.193
2.00	.016	.016	.012	.008	.004	.008	.035	.010	.023	.018	.012	.031	.043	.035	.037	.035	.341
3.00	.053	.033	.039	.031	.037	.072	.082	.070	.047	.084	.094	.123	.082	.097	.099	.076	1.119
4.00	.035	.047	.039	.043	.035	.045	.051	.070	.045	.111	.162	.152	.084	.055	.051	.051	1.074
5.00	.029	.021	.029	.041	.041	.031	.010	.014	.016	.078	.107	.053	.037	.027	.019	.041	.594
6.00	.018	.010	.010	.019	.035	.010	.004	.002	.002	.041	.088	.019	.012	.014	.010	.008	.300
8.00	.008	.004	.002	.019	.019	.006	.002	.000	.000	.021	.057	.006	.004	.018	.006	.004	.175
10.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.008	.000	.000	.000	.000	.000	.010
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002
TOTAL	.18	.14	.14	.17	.17	.18	.19	.18	.14	.37	.54	.42	.30	.28	.25	.23	3.87

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.001	.001	.001	.001	.000	.000	.000	.000	.001	.001	.001	.000	.002	.002	.001	.001	.012
1.00	.006	.004	.006	.004	.000	.000	.000	.002	.004	.008	.008	.000	.016	.014	.008	.006	.084
1.50	.006	.016	.006	.012	.004	.004	.006	.014	.008	.012	.016	.019	.025	.031	.025	.010	.212
2.00	.018	.031	.021	.014	.010	.025	.019	.014	.014	.039	.047	.060	.041	.033	.039	.029	.454
3.00	.074	.062	.051	.035	.033	.060	.055	.078	.074	.074	.117	.144	.107	.088	.078	.105	1.236
4.00	.041	.033	.072	.074	.039	.047	.047	.033	.027	.117	.156	.134	.076	.066	.053	.070	1.086
5.00	.043	.021	.023	.074	.031	.029	.018	.012	.014	.076	.111	.064	.055	.039	.027	.027	.665
6.00	.023	.039	.018	.043	.021	.029	.006	.006	.010	.049	.078	.023	.051	.023	.008	.018	.444
8.00	.006	.016	.014	.031	.031	.012	.004	.000	.000	.037	.097	.014	.008	.010	.006	.008	.292
10.00	.000	.002	.000	.006	.002	.000	.000	.000	.000	.000	.016	.000	.000	.000	.000	.000	.025
20.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.004
TOTAL	.22	.22	.21	.29	.17	.21	.15	.16	.15	.41	.65	.46	.38	.31	.24	.27	4.51

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.007	.006	.006	.001	.001	.002	.003	.002	.005	.009	.009	.017	.020	.020	.013	.011	.133
1.00	.039	.035	.035	.008	.008	.010	.018	.012	.027	.049	.053	.095	.117	.113	.076	.062	.756
1.50	.123	.111	.058	.031	.031	.045	.033	.043	.074	.062	.134	.232	.201	.226	.185	.142	1.733
2.00	.154	.218	.125	.058	.053	.099	.078	.095	.115	.117	.285	.493	.362	.257	.324	.232	3.066
3.00	.304	.374	.604	.296	.251	.374	.374	.253	.353	.481	.926	.994	.665	.631	.575	.645	8.101
4.00	.324	.238	.723	.495	.400	.378	.345	.216	.345	.624	.978	.702	.470	.368	.341	.437	7.382
5.00	.325	.207	.435	.433	.306	.271	.146	.129	.203	.649	.861	.310	.222	.220	.166	.171	5.053
6.00	.160	.195	.185	.195	.246	.101	.027	.037	.066	.337	.614	.103	.097	.154	.047	.099	2.664
8.00	.109	.078	.033	.162	.195	.084	.023	.010	.019	.234	.384	.076	.027	.049	.016	.039	1.538
10.00	.010	.031	.004	.010	.049	.002	.008	.004	.000	.006	.076	.008	.002	.000	.000	.000	.209
20.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.004
TOTAL	1.55	1.49	2.21	1.69	1.54	1.37	1.06	.80	1.21	2.57	4.32	3.03	2.18	2.04	1.74	1.84	30.64

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.013	.008	.006	.004	.004	.004	.004	.005	.012	.014	.021	.036	.035	.039	.028	.015	.248
1.00	.097	.060	.043	.033	.027	.029	.029	.041	.094	.103	.162	.277	.269	.300	.212	.113	1.890
1.50	.168	.170	.086	.049	.039	.082	.062	.086	.158	.191	.405	.635	.431	.514	.429	.236	3.740
2.00	.195	.310	.084	.080	.101	.133	.107	.154	.265	.310	.565	.553	.324	.359	.456	.351	4.346
3.00	.362	.353	.474	.304	.304	.417	.421	.427	.587	1.128	.731	.446	.316	.294	.316	.456	7.336
4.00	.193	.131	.281	.259	.255	.372	.294	.279	.419	.947	.349	.111	.107	.140	.107	.123	4.367
5.00	.068	.037	.060	.115	.133	.105	.115	.140	.207	.540	.173	.041	.031	.041	.037	.039	1.883
6.00	.031	.006	.018	.033	.119	.072	.025	.039	.070	.209	.111	.006	.010	.012	.012	.018	.789
8.00	.014	.004	.000	.012	.084	.037	.010	.000	.029	.131	.058	.004	.004	.008	.006	.014	.413
10.00	.000	.000	.000	.008	.023	.004	.000	.004	.002	.004	.008	.000	.002	.002	.000	.000	.057
20.00	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.006
TOTAL	1.14	1.08	1.05	.90	1.09	1.25	1.07	1.17	1.84	3.58	2.58	2.11	1.53	1.71	1.60	1.36	25.07

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.009	.006	.003	.002	.002	.002	.003	.008	.013	.016	.024	.034	.043	.044	.028	.014	.249
1.00	.078	.053	.025	.016	.016	.021	.023	.068	.117	.136	.205	.292	.372	.380	.248	.121	2.171
1.50	.134	.070	.031	.018	.019	.021	.023	.068	.146	.209	.318	.411	.228	.405	.281	.193	2.576
2.00	.193	.094	.016	.012	.021	.066	.072	.080	.111	.181	.205	.103	.076	.138	.101	.142	1.612
3.00	.207	.076	.023	.023	.068	.115	.138	.205	.168	.331	.068	.018	.016	.033	.027	.095	1.612
4.00	.023	.019	.010	.027	.055	.068	.074	.134	.121	.220	.035	.010	.012	.004	.012	.008	.832
5.00	.014	.004	.000	.014	.019	.023	.043	.043	.074	.140	.010	.004	.002	.008	.004	.012	.413
6.00	.004	.000	.000	.002	.014	.004	.018	.018	.041	.033	.002	.004	.000	.002	.000	.000	.140
8.00	.000	.000	.000	.000	.019	.006	.004	.010	.010	.019	.002	.012	.002	.000	.000	.000	.084
10.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.002	.000	.000	.000	.008
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.002
TOTAL	.66	.32	.11	.11	.23	.33	.40	.63	.80	1.29	.87	.89	.75	1.01	.70	.58	9.70

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.003	.001	.001	.000	.000	.001	.001	.001	.002	.003	.006	.015	.028	.038	.018	.009	.127
1.00	.037	.019	.008	.004	.002	.018	.012	.014	.027	.041	.082	.199	.390	.520	.240	.123	1.734
1.50	.086	.029	.012	.006	.006	.023	.033	.019	.018	.082	.070	.162	.136	.427	.193	.134	1.436
2.00	.058	.006	.000	.006	.016	.039	.055	.029	.021	.057	.039	.045	.012	.051	.019	.072	.524
3.00	.047	.019	.004	.006	.019	.060	.095	.076	.041	.057	.021	.004	.004	.006	.006	.041	.507
4.00	.004	.000	.000	.002	.027	.037	.039	.051	.016	.035	.010	.002	.000	.002	.000	.000	.224
5.00	.002	.000	.000	.000	.012	.018	.027	.021	.010	.021	.014	.008	.000	.000	.000	.000	.133
6.00	.000	.000	.000	.000	.002	.002	.010	.010	.000	.004	.002	.002	.000	.000	.000	.000	.031
8.00	.000	.000	.000	.000	.000	.002	.002	.004	.000	.000	.000	.000	.000	.000	.000	.000	.008
10.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL	.24	.08	.02	.02	.09	.20	.27	.23	.13	.30	.24	.44	.57	1.04	.48	.38	4.73

TOTAL HOURS CONSIDERED ARE 51312
OWIND MEASURED AT 10.0 METERS.
OOVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.6	3.8	4.5	4.3	4.7	5.5	5.2	4.7	5.4	10.4	10.6	8.7	7.1	8.1	6.5	5.8	100.0

OOVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.340	1.000	1.500	2.000	3.000	4.000	5.000	6.000	8.000	10.000	20.000
AVE WIND SPEED (M/S):	.170	.670	1.250	1.750	2.500	3.500	4.500	5.500	7.000	9.000	15.000
WIND SPEED FREQUENCY:	.90	6.87	10.58	12.10	26.98	21.70	11.84	5.59	3.08	.34	.02

ODISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.

DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.528E-05	1.315E-05	6.410E-06	3.058E-06	1.153E-06	6.060E-07	3.775E-07	2.606E-07	1.926E-07	1.494E-07	1.201E-07
SSW	3.204E-05	9.322E-06	4.566E-06	2.175E-06	8.157E-07	4.264E-07	2.644E-07	1.817E-07	1.338E-07	1.034E-07	8.287E-08
SW	2.531E-05	7.284E-06	3.564E-06	1.694E-06	6.322E-07	3.286E-07	2.026E-07	1.386E-07	1.016E-07	7.821E-08	6.246E-08
WSW	1.876E-05	5.306E-06	2.578E-06	1.222E-06	4.566E-07	2.377E-07	1.468E-07	1.006E-07	7.383E-08	5.692E-08	4.551E-08
W	1.981E-05	5.656E-06	2.754E-06	1.309E-06	4.909E-07	2.565E-07	1.589E-07	1.092E-07	8.035E-08	6.207E-08	4.973E-08
WNW	2.844E-05	8.075E-06	3.911E-06	1.859E-06	7.008E-07	3.680E-07	2.290E-07	1.580E-07	1.167E-07	9.042E-08	7.265E-08
NW	2.858E-05	8.076E-06	3.896E-06	1.852E-06	6.999E-07	3.684E-07	2.298E-07	1.588E-07	1.175E-07	9.119E-08	7.338E-08
NNW	3.257E-05	9.326E-06	4.523E-06	2.153E-06	8.134E-07	4.282E-07	2.671E-07	1.846E-07	1.366E-07	1.061E-07	8.534E-08
N	4.607E-05	1.337E-05	6.528E-06	3.111E-06	1.173E-06	6.163E-07	3.838E-07	2.648E-07	1.956E-07	1.517E-07	1.219E-07
NNE	7.447E-05	2.162E-05	1.056E-05	5.033E-06	1.896E-06	9.956E-07	6.198E-07	4.275E-07	3.157E-07	2.447E-07	1.967E-07
NE	8.555E-05	2.487E-05	1.215E-05	5.793E-06	2.178E-06	1.141E-06	7.091E-07	4.883E-07	3.601E-07	2.787E-07	2.237E-07
ENE	1.077E-04	3.129E-05	1.525E-05	7.280E-06	2.747E-06	1.445E-06	9.008E-07	6.222E-07	4.600E-07	3.570E-07	2.871E-07
E	1.130E-04	3.268E-05	1.584E-05	7.569E-06	2.869E-06	1.515E-06	9.482E-07	6.571E-07	4.873E-07	3.791E-07	3.057E-07
ESE	1.442E-04	4.171E-05	2.018E-05	9.652E-06	3.669E-06	1.943E-06	1.219E-06	8.469E-07	6.293E-07	4.905E-07	3.961E-07
SE	9.117E-05	2.639E-05	1.281E-05	6.119E-06	2.317E-06	1.223E-06	7.648E-07	5.297E-07	3.926E-07	3.053E-07	2.460E-07
SSE	6.383E-05	1.847E-05	8.980E-06	4.286E-06	1.620E-06	8.529E-07	5.323E-07	3.680E-07	2.723E-07	2.115E-07	1.702E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.926E-08	5.094E-08	3.307E-08	1.907E-08	1.298E-08	9.656E-09	7.595E-09	6.207E-09	5.215E-09	4.475E-09	3.905E-09
SSW	6.831E-08	3.466E-08	2.231E-08	1.270E-08	8.572E-09	6.334E-09	4.954E-09	4.029E-09	3.371E-09	2.882E-09	2.506E-09
SW	5.132E-08	2.570E-08	1.638E-08	9.200E-09	6.147E-09	4.508E-09	3.504E-09	2.835E-09	2.362E-09	2.011E-09	1.743E-09
WSW	3.744E-08	1.886E-08	1.207E-08	6.832E-09	4.594E-09	3.386E-09	2.644E-09	2.147E-09	1.795E-09	1.533E-09	1.332E-09
W	4.098E-08	2.078E-08	1.337E-08	7.611E-09	5.135E-09	3.794E-09	2.968E-09	2.415E-09	2.021E-09	1.728E-09	1.503E-09
WNW	6.004E-08	3.077E-08	1.996E-08	1.150E-08	7.828E-09	5.825E-09	4.583E-09	3.747E-09	3.149E-09	2.703E-09	2.360E-09
NW	6.072E-08	3.129E-08	2.038E-08	1.181E-08	8.072E-09	6.026E-09	4.754E-09	3.895E-09	3.280E-09	2.820E-09	2.465E-09
NNW	7.062E-08	3.638E-08	2.369E-08	1.371E-08	9.362E-09	6.981E-09	5.502E-09	4.504E-09	3.789E-09	3.256E-09	2.844E-09
N	1.007E-07	5.161E-08	3.346E-08	1.924E-08	1.307E-08	9.705E-09	7.622E-09	6.220E-09	5.220E-09	4.474E-09	3.900E-09
NNE	1.625E-07	8.324E-08	5.396E-08	3.104E-08	2.108E-08	1.566E-08	1.230E-08	1.004E-08	8.429E-09	7.226E-09	6.299E-09
NE	1.846E-07	9.418E-08	6.086E-08	3.486E-08	2.362E-08	1.751E-08	1.373E-08	1.119E-08	9.382E-09	8.035E-09	6.998E-09
ENE	2.374E-07	1.221E-07	7.933E-08	4.581E-08	3.121E-08	2.324E-08	1.829E-08	1.496E-08	1.258E-08	1.080E-08	9.424E-09
E	2.533E-07	1.314E-07	8.595E-08	5.011E-08	3.438E-08	2.574E-08	2.035E-08	1.670E-08	1.409E-08	1.213E-08	1.062E-08
ESE	3.287E-07	1.714E-07	1.126E-07	6.603E-08	4.548E-08	3.415E-08	2.707E-08	2.226E-08	1.881E-08	1.622E-08	1.422E-08
SE	2.038E-07	1.055E-07	6.893E-08	4.011E-08	2.747E-08	2.054E-08	1.622E-08	1.330E-08	1.121E-08	9.648E-09	8.438E-09
SSE	1.409E-07	7.261E-08	4.730E-08	2.741E-08	1.872E-08	1.397E-08	1.101E-08	9.019E-09	7.592E-09	6.526E-09	5.703E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0

HEAT EMISSION RATE (CAL/SEC) .0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
S	6.418E-06	1.333E-06	3.917E-07	1.955E-07	1.210E-07	5.374E-08	1.948E-08	9.718E-09	6.226E-09	4.483E-09
SSW	4.560E-06	9.448E-07	2.745E-07	1.359E-07	8.356E-08	3.665E-08	1.300E-08	6.379E-09	4.043E-09	2.888E-09
SW	3.560E-06	7.333E-07	2.106E-07	1.033E-07	6.300E-08	2.725E-08	9.439E-09	4.543E-09	2.846E-09	2.016E-09
WSW	2.581E-06	5.293E-07	1.526E-07	7.503E-08	4.590E-08	1.997E-08	7.002E-09	3.411E-09	2.155E-09	1.536E-09
W	2.757E-06	5.684E-07	1.651E-07	8.163E-08	5.015E-08	2.198E-08	7.790E-09	3.821E-09	2.423E-09	1.732E-09
WNW	3.924E-06	8.103E-07	2.377E-07	1.185E-07	7.324E-08	3.247E-08	1.175E-08	5.862E-09	3.758E-09	2.708E-09
NW	3.917E-06	8.087E-07	2.384E-07	1.193E-07	7.397E-08	3.298E-08	1.205E-08	6.063E-09	3.906E-09	2.825E-09
NNW	4.537E-06	9.400E-07	2.771E-07	1.387E-07	8.603E-08	3.835E-08	1.400E-08	7.024E-09	4.517E-09	3.261E-09
N	6.529E-06	1.356E-06	3.982E-07	1.987E-07	1.229E-07	5.446E-08	1.966E-08	9.769E-09	6.240E-09	4.482E-09
NNE	1.056E-05	2.193E-06	6.431E-07	3.206E-07	1.983E-07	8.784E-08	3.171E-08	1.576E-08	1.007E-08	7.239E-09
NE	1.215E-05	2.521E-06	7.360E-07	3.657E-07	2.256E-07	9.948E-08	3.564E-08	1.763E-08	1.123E-08	8.050E-09
ENE	1.527E-05	3.176E-06	9.345E-07	4.671E-07	2.894E-07	1.287E-07	4.677E-08	2.339E-08	1.500E-08	1.082E-08
E	1.591E-05	3.312E-06	9.830E-07	4.946E-07	3.081E-07	1.383E-07	5.108E-08	2.589E-08	1.675E-08	1.215E-08
ESE	2.029E-05	4.231E-06	1.263E-06	6.386E-07	3.991E-07	1.803E-07	6.725E-08	3.434E-08	2.232E-08	1.625E-08
SE	1.285E-05	2.676E-06	7.930E-07	3.985E-07	2.479E-07	1.111E-07	4.089E-08	2.066E-08	1.334E-08	9.664E-09
SSE	9.004E-06	1.871E-06	5.521E-07	2.765E-07	1.716E-07	7.653E-08	2.797E-08	1.405E-08	9.045E-09	6.537E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.520E-05	1.310E-05	6.376E-06	3.036E-06	1.141E-06	5.974E-07	3.709E-07	2.551E-07	1.878E-07	1.452E-07	1.163E-07
SSW	3.198E-05	9.291E-06	4.542E-06	2.160E-06	8.075E-07	4.207E-07	2.600E-07	1.781E-07	1.306E-07	1.006E-07	8.038E-08
SW	2.528E-05	7.263E-06	3.550E-06	1.685E-06	6.269E-07	3.249E-07	1.998E-07	1.363E-07	9.960E-08	7.646E-08	6.089E-08
WSW	1.874E-05	5.293E-06	2.568E-06	1.216E-06	4.532E-07	2.354E-07	1.450E-07	9.909E-08	7.255E-08	5.579E-08	4.449E-08
W	1.979E-05	5.644E-06	2.745E-06	1.303E-06	4.878E-07	2.543E-07	1.573E-07	1.078E-07	7.917E-08	6.104E-08	4.880E-08
WNW	2.840E-05	8.056E-06	3.897E-06	1.851E-06	6.958E-07	3.645E-07	2.264E-07	1.558E-07	1.147E-07	8.872E-08	7.112E-08
NW	2.855E-05	8.057E-06	3.882E-06	1.844E-06	6.949E-07	3.649E-07	2.271E-07	1.566E-07	1.155E-07	8.949E-08	7.185E-08
NNW	3.252E-05	9.298E-06	4.503E-06	2.141E-06	8.061E-07	4.231E-07	2.632E-07	1.814E-07	1.338E-07	1.036E-07	8.310E-08
N	4.598E-05	1.332E-05	6.493E-06	3.089E-06	1.160E-06	6.075E-07	3.770E-07	2.592E-07	1.908E-07	1.474E-07	1.180E-07
NNE	7.436E-05	2.156E-05	1.051E-05	5.002E-06	1.879E-06	9.837E-07	6.105E-07	4.199E-07	3.092E-07	2.389E-07	1.914E-07
NE	8.539E-05	2.478E-05	1.209E-05	5.750E-06	2.154E-06	1.124E-06	6.959E-07	4.774E-07	3.507E-07	2.705E-07	2.163E-07
ENE	1.074E-04	3.115E-05	1.515E-05	7.212E-06	2.709E-06	1.418E-06	8.798E-07	6.048E-07	4.451E-07	3.437E-07	2.752E-07
E	1.127E-04	3.249E-05	1.571E-05	7.483E-06	2.820E-06	1.481E-06	9.215E-07	6.349E-07	4.682E-07	3.622E-07	2.904E-07
ESE	1.438E-04	4.149E-05	2.002E-05	9.548E-06	3.610E-06	1.902E-06	1.187E-06	8.199E-07	6.060E-07	4.698E-07	3.774E-07
SE	9.094E-05	2.626E-05	1.272E-05	6.058E-06	2.282E-06	1.199E-06	7.458E-07	5.139E-07	3.790E-07	2.932E-07	2.351E-07
SSE	6.370E-05	1.840E-05	8.924E-06	4.251E-06	1.599E-06	8.388E-07	5.213E-07	3.589E-07	2.645E-07	2.046E-07	1.640E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000

S	9.580E-08	4.833E-08	3.085E-08	1.722E-08	1.136E-08	8.199E-09	6.265E-09	4.978E-09	4.071E-09	3.402E-09	2.893E-09
SSW	6.603E-08	3.295E-08	2.086E-08	1.151E-08	7.532E-09	5.404E-09	4.109E-09	3.251E-09	2.649E-09	2.206E-09	1.871E-09
SW	4.988E-08	2.463E-08	1.548E-08	8.465E-09	5.511E-09	3.941E-09	2.991E-09	2.364E-09	1.925E-09	1.604E-09	1.361E-09
WSW	3.651E-08	1.815E-08	1.148E-08	6.333E-09	4.157E-09	2.994E-09	2.286E-09	1.817E-09	1.487E-09	1.245E-09	1.061E-09
W	4.013E-08	2.014E-08	1.283E-08	7.162E-09	4.742E-09	3.441E-09	2.645E-09	2.116E-09	1.742E-09	1.466E-09	1.256E-09
WNW	5.863E-08	2.970E-08	1.905E-08	1.073E-08	7.151E-09	5.212E-09	4.020E-09	3.223E-09	2.658E-09	2.240E-09	1.920E-09
NW	5.931E-08	3.022E-08	1.947E-08	1.105E-08	7.395E-09	5.412E-09	4.188E-09	3.368E-09	2.786E-09	2.354E-09	2.022E-09
NNW	6.856E-08	3.482E-08	2.236E-08	1.260E-08	8.382E-09	6.098E-09	4.694E-09	3.756E-09	3.091E-09	2.600E-09	2.225E-09
N	9.721E-08	4.895E-08	3.120E-08	1.737E-08	1.143E-08	8.238E-09	6.287E-09	4.991E-09	4.078E-09	3.406E-09	2.896E-09
NNE	1.577E-07	7.961E-08	5.087E-08	2.846E-08	1.883E-08	1.363E-08	1.045E-08	8.329E-09	6.832E-09	5.729E-09	4.887E-09
NE	1.778E-07	8.902E-08	5.648E-08	3.122E-08	2.043E-08	1.465E-08	1.113E-08	8.797E-09	7.158E-09	5.956E-09	5.043E-09
ENE	2.265E-07	1.138E-07	7.227E-08	3.993E-08	2.608E-08	1.864E-08	1.410E-08	1.110E-08	8.995E-09	7.452E-09	6.282E-09
E	2.393E-07	1.207E-07	7.680E-08	4.245E-08	2.767E-08	1.972E-08	1.487E-08	1.166E-08	9.404E-09	7.756E-09	6.510E-09
ESE	3.116E-07	1.583E-07	1.013E-07	5.654E-08	3.713E-08	2.663E-08	2.019E-08	1.591E-08	1.290E-08	1.069E-08	9.005E-09
SE	1.938E-07	9.789E-08	6.243E-08	3.466E-08	2.270E-08	1.625E-08	1.231E-08	9.697E-09	7.860E-09	6.512E-09	5.490E-09
SSE	1.351E-07	6.825E-08	4.358E-08	2.429E-08	1.598E-08	1.150E-08	8.763E-09	6.940E-09	5.656E-09	4.711E-09	3.992E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.386E-06	1.321E-06	3.850E-07	1.908E-07	1.173E-07	5.111E-08	1.764E-08	8.267E-09	5.000E-09	3.412E-09
SSW	4.539E-06	9.362E-07	2.701E-07	1.328E-07	8.106E-08	3.493E-08	1.182E-08	5.453E-09	3.266E-09	2.213E-09
SW	3.546E-06	7.278E-07	2.078E-07	1.013E-07	6.143E-08	2.618E-08	8.712E-09	3.980E-09	2.376E-09	1.609E-09
WSW	2.573E-06	5.259E-07	1.507E-07	7.375E-08	4.488E-08	1.926E-08	6.509E-09	3.021E-09	1.825E-09	1.248E-09
W	2.749E-06	5.652E-07	1.634E-07	8.045E-08	4.922E-08	2.133E-08	7.345E-09	3.470E-09	2.125E-09	1.470E-09
WNW	3.912E-06	8.052E-07	2.350E-07	1.165E-07	7.171E-08	3.140E-08	1.099E-08	5.252E-09	3.235E-09	2.245E-09
NW	3.904E-06	8.035E-07	2.356E-07	1.173E-07	7.243E-08	3.191E-08	1.130E-08	5.451E-09	3.381E-09	2.359E-09
NNW	4.519E-06	9.324E-07	2.731E-07	1.359E-07	8.378E-08	3.678E-08	1.289E-08	6.146E-09	3.771E-09	2.607E-09
N	6.496E-06	1.343E-06	3.913E-07	1.938E-07	1.190E-07	5.178E-08	1.780E-08	8.309E-09	5.013E-09	3.416E-09
NNE	1.052E-05	2.175E-06	6.338E-07	3.140E-07	1.930E-07	8.419E-08	2.916E-08	1.374E-08	8.365E-09	5.744E-09
NE	1.209E-05	2.495E-06	7.227E-07	3.564E-07	2.181E-07	9.429E-08	3.204E-08	1.479E-08	8.839E-09	5.974E-09
ENE	1.518E-05	3.136E-06	9.133E-07	4.521E-07	2.774E-07	1.204E-07	4.096E-08	1.881E-08	1.116E-08	7.476E-09
E	1.578E-05	3.261E-06	9.560E-07	4.754E-07	2.927E-07	1.275E-07	4.352E-08	1.990E-08	1.172E-08	7.783E-09
ESE	2.014E-05	4.170E-06	1.231E-06	6.152E-07	3.804E-07	1.670E-07	5.787E-08	2.685E-08	1.599E-08	1.072E-08
SE	1.277E-05	2.640E-06	7.738E-07	3.849E-07	2.370E-07	1.034E-07	3.551E-08	1.639E-08	9.744E-09	6.533E-09
SSE	8.953E-06	1.851E-06	5.410E-07	2.686E-07	1.653E-07	7.215E-08	2.488E-08	1.160E-08	6.972E-09	4.725E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.283E-05	1.200E-05	5.704E-06	2.672E-06	9.763E-07	4.998E-07	3.043E-07	2.057E-07	1.492E-07	1.137E-07	8.995E-08
SSW	3.031E-05	8.505E-06	4.063E-06	1.900E-06	6.908E-07	3.518E-07	2.131E-07	1.435E-07	1.037E-07	7.876E-08	6.211E-08
SW	2.395E-05	6.646E-06	3.173E-06	1.481E-06	5.356E-07	2.712E-07	1.635E-07	1.096E-07	7.883E-08	5.965E-08	4.688E-08
WSW	1.775E-05	4.842E-06	2.295E-06	1.068E-06	3.869E-07	1.963E-07	1.185E-07	7.956E-08	5.732E-08	4.344E-08	3.419E-08
W	1.874E-05	5.162E-06	2.452E-06	1.144E-06	4.161E-07	2.119E-07	1.284E-07	8.642E-08	6.243E-08	4.742E-08	3.740E-08
WNW	2.690E-05	7.369E-06	3.481E-06	1.625E-06	5.940E-07	3.039E-07	1.849E-07	1.250E-07	9.060E-08	6.904E-08	5.460E-08
NW	2.704E-05	7.370E-06	3.469E-06	1.619E-06	5.932E-07	3.042E-07	1.855E-07	1.256E-07	9.123E-08	6.963E-08	5.515E-08
NNW	3.081E-05	8.509E-06	4.026E-06	1.882E-06	6.890E-07	3.534E-07	2.155E-07	1.459E-07	1.060E-07	8.086E-08	6.403E-08
N	4.358E-05	1.219E-05	5.808E-06	2.718E-06	9.931E-07	5.082E-07	3.093E-07	2.091E-07	1.516E-07	1.155E-07	9.132E-08
NNE	7.045E-05	1.973E-05	9.397E-06	4.398E-06	1.606E-06	8.216E-07	4.999E-07	3.378E-07	2.449E-07	1.866E-07	1.475E-07
NE	8.092E-05	2.269E-05	1.081E-05	5.061E-06	1.844E-06	9.410E-07	5.713E-07	3.854E-07	2.789E-07	2.121E-07	1.675E-07
ENE	1.019E-04	2.854E-05	1.357E-05	6.355E-06	2.324E-06	1.190E-06	7.248E-07	4.902E-07	3.556E-07	2.711E-07	2.144E-07
E	1.068E-04	2.979E-05	1.408E-05	6.604E-06	2.424E-06	1.247E-06	7.618E-07	5.169E-07	3.759E-07	2.872E-07	2.277E-07
ESE	1.364E-04	3.803E-05	1.794E-05	8.423E-06	3.101E-06	1.599E-06	9.801E-07	6.665E-07	4.858E-07	3.719E-07	2.953E-07
SE	8.623E-05	2.406E-05	1.139E-05	5.341E-06	1.960E-06	1.007E-06	6.151E-07	4.171E-07	3.033E-07	2.317E-07	1.836E-07
SSE	6.038E-05	1.685E-05	7.988E-06	3.743E-06	1.371E-06	7.029E-07	4.286E-07	2.902E-07	2.107E-07	1.608E-07	1.273E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	7.324E-08	3.537E-08	2.177E-08	1.150E-08	7.280E-09	5.081E-09	3.773E-09	2.924E-09	2.337E-09	1.913E-09	1.596E-09
SSW	5.042E-08	2.408E-08	1.470E-08	7.671E-09	4.814E-09	3.338E-09	2.465E-09	1.901E-09	1.514E-09	1.235E-09	1.027E-09
SW	3.794E-08	1.789E-08	1.082E-08	5.580E-09	3.472E-09	2.393E-09	1.758E-09	1.351E-09	1.072E-09	8.723E-10	7.237E-10
WSW	2.771E-08	1.315E-08	7.991E-09	4.153E-09	2.602E-09	1.803E-09	1.332E-09	1.027E-09	8.185E-10	6.682E-10	5.562E-10
W	3.037E-08	1.452E-08	8.874E-09	4.648E-09	2.928E-09	2.038E-09	1.511E-09	1.170E-09	9.349E-10	7.656E-10	6.391E-10
WNW	4.445E-08	2.147E-08	1.323E-08	7.007E-09	4.449E-09	3.116E-09	2.321E-09	1.805E-09	1.448E-09	1.189E-09	9.953E-10
NW	4.495E-08	2.184E-08	1.351E-08	7.201E-09	4.592E-09	3.227E-09	2.412E-09	1.880E-09	1.511E-09	1.244E-09	1.043E-09
NNW	5.219E-08	2.532E-08	1.565E-08	8.314E-09	5.287E-09	3.705E-09	2.761E-09	2.147E-09	1.721E-09	1.413E-09	1.182E-09
N	7.432E-08	3.583E-08	2.202E-08	1.160E-08	7.328E-09	5.105E-09	3.784E-09	2.928E-09	2.337E-09	1.911E-09	1.593E-09
NNE	1.201E-07	5.792E-08	3.563E-08	1.881E-08	1.190E-08	8.303E-09	6.166E-09	4.779E-09	3.821E-09	3.130E-09	2.612E-09
NE	1.362E-07	6.532E-08	4.000E-08	2.098E-08	1.320E-08	9.170E-09	6.781E-09	5.235E-09	4.171E-09	3.405E-09	2.832E-09
ENE	1.746E-07	8.430E-08	5.186E-08	2.735E-08	1.726E-08	1.202E-08	8.899E-09	6.876E-09	5.480E-09	4.473E-09	3.721E-09
E	1.858E-07	9.036E-08	5.587E-08	2.966E-08	1.881E-08	1.313E-08	9.737E-09	7.532E-09	6.008E-09	4.906E-09	4.081E-09
ESE	2.413E-07	1.181E-07	7.336E-08	3.921E-08	2.499E-08	1.751E-08	1.304E-08	1.012E-08	8.094E-09	6.627E-09	5.527E-09
SE	1.497E-07	7.278E-08	4.499E-08	2.388E-08	1.514E-08	1.058E-08	7.854E-09	6.082E-09	4.856E-09	3.970E-09	3.307E-09
SSE	1.038E-07	5.028E-08	3.102E-08	1.644E-08	1.042E-08	7.282E-09	5.410E-09	4.193E-09	3.352E-09	2.744E-09	2.288E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.754E-06	1.141E-06	3.170E-07	1.518E-07	9.080E-08	3.774E-08	1.191E-08	5.144E-09	2.943E-09	1.921E-09
SSW	4.089E-06	8.089E-07	2.223E-07	1.056E-07	6.271E-08	2.576E-08	7.962E-09	3.382E-09	1.915E-09	1.241E-09
SW	3.193E-06	6.281E-07	1.707E-07	8.031E-08	4.735E-08	1.921E-08	5.809E-09	2.427E-09	1.361E-09	8.764E-10
WSW	2.316E-06	4.535E-07	1.237E-07	5.839E-08	3.453E-08	1.409E-08	4.317E-09	1.828E-09	1.035E-09	6.713E-10
W	2.473E-06	4.871E-07	1.339E-07	6.357E-08	3.776E-08	1.553E-08	4.822E-09	2.064E-09	1.178E-09	7.689E-10

WNW	3.521E-06	6.942E-07	1.927E-07	9.221E-08	5.512E-08	2.291E-08	7.253E-09	3.154E-09	1.816E-09	1.194E-09
NW	3.514E-06	6.928E-07	1.932E-07	9.283E-08	5.566E-08	2.327E-08	7.444E-09	3.265E-09	1.891E-09	1.249E-09
NNW	4.069E-06	8.049E-07	2.244E-07	1.078E-07	6.463E-08	2.699E-08	8.598E-09	3.749E-09	2.160E-09	1.419E-09
N	5.853E-06	1.161E-06	3.223E-07	1.542E-07	9.218E-08	3.825E-08	1.202E-08	5.169E-09	2.947E-09	1.919E-09
NNE	9.471E-06	1.878E-06	5.209E-07	2.492E-07	1.489E-07	6.183E-08	1.947E-08	8.407E-09	4.810E-09	3.143E-09
NE	1.089E-05	2.157E-06	5.955E-07	2.839E-07	1.691E-07	6.981E-08	2.175E-08	9.289E-09	5.272E-09	3.420E-09
ENE	1.369E-05	2.716E-06	7.550E-07	3.619E-07	2.165E-07	8.995E-08	2.831E-08	1.217E-08	6.922E-09	4.493E-09
E	1.425E-05	2.830E-06	7.931E-07	3.824E-07	2.298E-07	9.624E-08	3.066E-08	1.329E-08	7.582E-09	4.927E-09
ESE	1.818E-05	3.616E-06	1.020E-06	4.940E-07	2.980E-07	1.256E-07	4.048E-08	1.772E-08	1.018E-08	6.654E-09
SE	1.152E-05	2.288E-06	6.404E-07	3.085E-07	1.853E-07	7.753E-08	2.469E-08	1.071E-08	6.121E-09	3.987E-09
SSE	8.071E-06	1.601E-06	4.464E-07	2.144E-07	1.285E-07	5.360E-08	1.701E-08	7.371E-09	4.221E-09	2.755E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Ground Level/Radwaste Bldg

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
					DISTANCES IN MILES						
S	1.074E-07	3.631E-08	1.864E-08	8.864E-09	3.184E-09	1.579E-09	9.297E-10	6.088E-10	4.284E-10	3.175E-10	2.446E-10
SSW	8.853E-08	2.994E-08	1.537E-08	7.308E-09	2.625E-09	1.302E-09	7.665E-10	5.019E-10	3.532E-10	2.617E-10	2.017E-10
SW	1.053E-07	3.561E-08	1.828E-08	8.692E-09	3.122E-09	1.548E-09	9.117E-10	5.970E-10	4.201E-10	3.113E-10	2.399E-10
WSW	9.867E-08	3.337E-08	1.713E-08	8.145E-09	2.926E-09	1.451E-09	8.543E-10	5.594E-10	3.936E-10	2.917E-10	2.248E-10
W	1.078E-07	3.645E-08	1.871E-08	8.897E-09	3.196E-09	1.585E-09	9.332E-10	6.110E-10	4.300E-10	3.186E-10	2.456E-10
WNW	1.272E-07	4.303E-08	2.209E-08	1.050E-08	3.773E-09	1.871E-09	1.102E-09	7.214E-10	5.076E-10	3.762E-10	2.899E-10
NW	1.208E-07	4.085E-08	2.097E-08	9.970E-09	3.581E-09	1.776E-09	1.046E-09	6.848E-10	4.818E-10	3.571E-10	2.752E-10
NNW	1.088E-07	3.679E-08	1.889E-08	8.981E-09	3.226E-09	1.600E-09	9.420E-10	6.168E-10	4.340E-10	3.217E-10	2.479E-10
N	1.260E-07	4.262E-08	2.188E-08	1.040E-08	3.737E-09	1.853E-09	1.091E-09	7.145E-10	5.028E-10	3.726E-10	2.871E-10
NNE	2.402E-07	8.123E-08	4.171E-08	1.983E-08	7.122E-09	3.532E-09	2.080E-09	1.362E-09	9.583E-10	7.102E-10	5.473E-10
NE	2.459E-07	8.314E-08	4.269E-08	2.030E-08	7.290E-09	3.615E-09	2.129E-09	1.394E-09	9.808E-10	7.269E-10	5.601E-10
ENE	2.016E-07	6.817E-08	3.500E-08	1.664E-08	5.977E-09	2.964E-09	1.745E-09	1.143E-09	8.042E-10	5.960E-10	4.593E-10
E	1.656E-07	5.599E-08	2.875E-08	1.367E-08	4.910E-09	2.435E-09	1.434E-09	9.387E-10	6.605E-10	4.895E-10	3.772E-10
ESE	1.872E-07	6.331E-08	3.251E-08	1.545E-08	5.551E-09	2.753E-09	1.621E-09	1.061E-09	7.469E-10	5.535E-10	4.265E-10
SE	1.508E-07	5.099E-08	2.618E-08	1.245E-08	4.471E-09	2.217E-09	1.306E-09	8.549E-10	6.015E-10	4.458E-10	3.435E-10
SSE	1.342E-07	4.538E-08	2.330E-08	1.108E-08	3.979E-09	1.973E-09	1.162E-09	7.608E-10	5.354E-10	3.968E-10	3.057E-10

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
					DISTANCES IN MILES						
S	1.943E-10	8.634E-11	5.230E-11	2.643E-11	1.600E-11	1.073E-11	7.687E-12	5.772E-12	4.488E-12	3.585E-12	2.926E-12
SSW	1.602E-10	7.118E-11	4.312E-11	2.179E-11	1.319E-11	8.844E-12	6.337E-12	4.759E-12	3.700E-12	2.956E-12	2.412E-12
SW	1.906E-10	8.466E-11	5.129E-11	2.592E-11	1.569E-11	1.052E-11	7.538E-12	5.660E-12	4.401E-12	3.515E-12	2.869E-12
WSW	1.786E-10	7.933E-11	4.806E-11	2.429E-11	1.470E-11	9.857E-12	7.063E-12	5.304E-12	4.124E-12	3.294E-12	2.689E-12
W	1.951E-10	8.666E-11	5.249E-11	2.653E-11	1.606E-11	1.077E-11	7.715E-12	5.793E-12	4.505E-12	3.598E-12	2.937E-12
WNW	2.303E-10	1.023E-10	6.197E-11	3.132E-11	1.896E-11	1.271E-11	9.109E-12	6.840E-12	5.318E-12	4.248E-12	3.467E-12
NW	2.186E-10	9.712E-11	5.883E-11	2.973E-11	1.800E-11	1.207E-11	8.646E-12	6.492E-12	5.048E-12	4.032E-12	3.291E-12
NNW	1.969E-10	8.748E-11	5.299E-11	2.679E-11	1.621E-11	1.087E-11	7.789E-12	5.848E-12	4.547E-12	3.632E-12	2.965E-12
N	2.281E-10	1.013E-10	6.139E-11	3.103E-11	1.878E-11	1.259E-11	9.022E-12	6.775E-12	5.267E-12	4.208E-12	3.434E-12
NNE	4.348E-10	1.931E-10	1.170E-10	5.914E-11	3.579E-11	2.400E-11	1.720E-11	1.291E-11	1.004E-11	8.019E-12	6.546E-12
NE	4.450E-10	1.977E-10	1.197E-10	6.053E-11	3.663E-11	2.456E-11	1.760E-11	1.322E-11	1.028E-11	8.208E-12	6.700E-12
ENE	3.649E-10	1.621E-10	9.819E-11	4.963E-11	3.004E-11	2.014E-11	1.443E-11	1.084E-11	8.425E-12	6.730E-12	5.493E-12
E	2.997E-10	1.331E-10	8.064E-11	4.076E-11	2.467E-11	1.654E-11	1.185E-11	8.900E-12	6.920E-12	5.528E-12	4.512E-12
ESE	3.389E-10	1.505E-10	9.118E-11	4.609E-11	2.790E-11	1.870E-11	1.340E-11	1.006E-11	7.824E-12	6.250E-12	5.102E-12
SE	2.729E-10	1.212E-10	7.344E-11	3.712E-11	2.247E-11	1.506E-11	1.079E-11	8.105E-12	6.302E-12	5.034E-12	4.109E-12
SSE	2.429E-10	1.079E-10	6.536E-11	3.304E-11	2.000E-11	1.341E-11	9.607E-12	7.214E-12	5.609E-12	4.480E-12	3.657E-12

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Residence	WSW	1.13	9.0E-07	8.9E-07	7.8E-07	5.9E-09
Residence	W	.98	1.4E-06	1.4E-06	1.2E-06	9.5E-09
Residence	NW	.69	4.5E-06	4.5E-06	4.1E-06	2.4E-08
Residence	NW	1.07	1.6E-06	1.6E-06	1.4E-06	8.5E-09
Residence	NNW	1.19	1.4E-06	1.4E-06	1.2E-06	5.7E-09
Residence	NNE	1.32	2.5E-06	2.5E-06	2.2E-06	9.7E-09
Residence	NNE	1.31	2.6E-06	2.6E-06	2.2E-06	1.0E-08
Residence	NE	1.36	2.8E-06	2.7E-06	2.4E-06	9.4E-09
Garden	S	1.28	1.7E-06	1.6E-06	1.4E-06	4.7E-09
Garden	WSW	2.14	2.0E-07	2.0E-07	1.7E-07	1.2E-09
Garden	W	1.50	4.9E-07	4.8E-07	4.1E-07	3.2E-09
Garden	NW	.69	4.5E-06	4.5E-06	4.0E-06	2.4E-08
Garden	NNW	1.09	1.7E-06	1.7E-06	1.5E-06	7.2E-09
Garden	NNW	1.46	8.6E-07	8.5E-07	7.3E-07	3.4E-09
Garden	N	2.31	4.5E-07	4.5E-07	3.7E-07	1.3E-09
Garden	NNE	2.16	8.4E-07	8.3E-07	6.9E-07	2.9E-09
Garden	NE	2.24	9.0E-07	8.8E-07	7.3E-07	2.8E-09
Sheep	NNW	4.46	8.7E-08	8.5E-08	6.5E-08	2.5E-10
Sheep	NNE	4.50	2.0E-07	1.9E-07	1.5E-07	5.5E-10
Goat	WNW	2.30	2.7E-07	2.7E-07	2.2E-07	1.3E-09
Goat	NNW	3.08	1.7E-07	1.7E-07	1.4E-07	5.8E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

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Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.266E-06	4.584E-07	2.871E-07	1.771E-07	9.966E-08	6.751E-08	4.988E-08	3.890E-08	3.152E-08	2.627E-08	2.237E-08
SSW	9.088E-07	3.436E-07	2.290E-07	1.508E-07	8.949E-08	6.134E-08	4.525E-08	3.509E-08	2.822E-08	2.334E-08	1.974E-08
SW	1.184E-06	4.507E-07	3.112E-07	2.067E-07	1.162E-07	7.552E-08	5.346E-08	4.015E-08	3.148E-08	2.550E-08	2.119E-08
WSW	1.247E-06	4.707E-07	3.056E-07	1.907E-07	1.002E-07	6.289E-08	4.363E-08	3.234E-08	2.513E-08	2.023E-08	1.693E-08
W	1.659E-06	5.685E-07	3.520E-07	2.142E-07	1.089E-07	6.745E-08	4.653E-08	3.441E-08	2.672E-08	2.151E-08	1.780E-08
WNW	1.917E-06	6.237E-07	3.712E-07	2.285E-07	1.205E-07	7.645E-08	5.361E-08	4.013E-08	3.146E-08	2.553E-08	2.127E-08
NW	1.930E-06	6.048E-07	3.398E-07	2.030E-07	1.069E-07	6.824E-08	4.817E-08	3.629E-08	2.862E-08	2.335E-08	1.965E-08
NNW	1.779E-06	5.695E-07	3.216E-07	1.897E-07	1.005E-07	6.537E-08	4.697E-08	3.593E-08	2.869E-08	2.366E-08	2.024E-08
N	1.853E-06	6.245E-07	3.749E-07	2.310E-07	1.281E-07	8.555E-08	6.251E-08	4.834E-08	3.891E-08	3.225E-08	2.754E-08
NNE	3.752E-06	1.300E-06	7.782E-07	4.557E-07	2.362E-07	1.518E-07	1.084E-07	8.252E-08	6.743E-08	5.679E-08	4.806E-08
NE	2.612E-06	9.983E-07	6.539E-07	4.118E-07	2.311E-07	1.540E-07	1.120E-07	8.615E-08	6.900E-08	5.695E-08	4.812E-08
ENE	1.518E-06	5.890E-07	3.925E-07	2.651E-07	1.702E-07	1.231E-07	9.432E-08	7.524E-08	6.190E-08	5.216E-08	4.481E-08
E	1.215E-06	4.666E-07	2.977E-07	1.969E-07	1.267E-07	9.245E-08	7.158E-08	5.769E-08	4.791E-08	4.072E-08	3.525E-08
ESE	1.361E-06	4.914E-07	3.016E-07	1.971E-07	1.278E-07	9.451E-08	7.403E-08	6.024E-08	5.044E-08	4.317E-08	3.761E-08
SE	1.188E-06	4.266E-07	2.622E-07	1.730E-07	1.130E-07	8.307E-08	6.449E-08	5.199E-08	4.314E-08	3.662E-08	3.166E-08
SSE	1.306E-06	4.701E-07	2.958E-07	1.894E-07	1.136E-07	7.916E-08	5.932E-08	4.664E-08	3.798E-08	3.176E-08	2.712E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000

S	1.941E-08	1.197E-08	8.674E-09	5.743E-09	4.289E-09	3.425E-09	2.855E-09	2.449E-09	2.145E-09	1.906E-09	1.713E-09
SSW	1.700E-08	1.008E-08	7.076E-09	4.461E-09	3.207E-09	2.481E-09	2.012E-09	1.686E-09	1.447E-09	1.265E-09	1.122E-09
SW	1.798E-08	1.005E-08	6.793E-09	4.069E-09	2.825E-09	2.127E-09	1.688E-09	1.388E-09	1.172E-09	1.010E-09	8.844E-10
WSW	1.447E-08	8.042E-09	5.436E-09	3.275E-09	2.289E-09	1.734E-09	1.381E-09	1.139E-09	9.629E-10	8.292E-10	7.242E-10
W	1.507E-08	8.738E-09	6.102E-09	3.845E-09	2.740E-09	2.066E-09	1.621E-09	1.319E-09	1.104E-09	9.441E-10	8.212E-10
WNW	1.811E-08	1.101E-08	8.012E-09	5.399E-09	3.979E-09	3.014E-09	2.375E-09	1.942E-09	1.632E-09	1.401E-09	1.223E-09
NW	1.689E-08	1.024E-08	7.430E-09	5.008E-09	3.782E-09	2.997E-09	2.424E-09	1.995E-09	1.683E-09	1.448E-09	1.266E-09
NNW	1.765E-08	1.134E-08	8.529E-09	5.947E-09	4.481E-09	3.456E-09	2.738E-09	2.243E-09	1.889E-09	1.624E-09	1.419E-09
N	2.395E-08	1.525E-08	1.132E-08	7.720E-09	5.811E-09	4.579E-09	3.689E-09	3.028E-09	2.544E-09	2.181E-09	1.901E-09
NNE	4.147E-08	2.421E-08	1.691E-08	1.063E-08	7.625E-09	5.888E-09	4.767E-09	3.988E-09	3.418E-09	2.984E-09	2.644E-09
NE	4.145E-08	2.454E-08	1.727E-08	1.094E-08	7.891E-09	6.122E-09	4.976E-09	4.178E-09	3.593E-09	3.147E-09	2.797E-09
ENE	3.913E-08	2.429E-08	1.759E-08	1.155E-08	8.547E-09	6.762E-09	5.588E-09	4.761E-09	4.148E-09	3.677E-09	3.303E-09
E	3.100E-08	1.948E-08	1.421E-08	9.394E-09	6.952E-09	5.482E-09	4.506E-09	3.813E-09	3.296E-09	2.898E-09	2.581E-09
ESE	3.326E-08	2.149E-08	1.601E-08	1.093E-08	8.290E-09	6.674E-09	5.586E-09	4.805E-09	4.217E-09	3.760E-09	3.393E-09
SE	2.779E-08	1.753E-08	1.283E-08	8.552E-09	6.385E-09	5.084E-09	4.222E-09	3.610E-09	3.155E-09	2.803E-09	2.524E-09
SSE	2.357E-08	1.489E-08	1.102E-08	7.606E-09	5.916E-09	4.901E-09	4.210E-09	3.695E-09	3.282E-09	2.934E-09	2.630E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

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Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.763E-07	1.026E-07	5.019E-08	3.163E-08	2.243E-08	1.216E-08	5.748E-09	3.427E-09	2.449E-09	1.905E-09
SSW	2.197E-07	9.061E-08	4.548E-08	2.832E-08	1.979E-08	1.028E-08	4.485E-09	2.487E-09	1.688E-09	1.266E-09
SW	2.958E-07	1.182E-07	5.402E-08	3.168E-08	2.128E-08	1.037E-08	4.121E-09	2.137E-09	1.391E-09	1.012E-09
WSW	2.913E-07	1.037E-07	4.425E-08	2.532E-08	1.700E-08	8.312E-09	3.317E-09	1.741E-09	1.141E-09	8.299E-10
W	3.389E-07	1.139E-07	4.726E-08	2.693E-08	1.789E-08	8.973E-09	3.856E-09	2.068E-09	1.323E-09	9.459E-10
WNW	3.639E-07	1.249E-07	5.431E-08	3.168E-08	2.136E-08	1.125E-08	5.349E-09	3.016E-09	1.948E-09	1.404E-09
NW	3.379E-07	1.111E-07	4.877E-08	2.880E-08	1.972E-08	1.047E-08	5.002E-09	2.977E-09	1.999E-09	1.450E-09
NNW	3.181E-07	1.047E-07	4.746E-08	2.884E-08	2.030E-08	1.149E-08	5.869E-09	3.442E-09	2.250E-09	1.626E-09
N	3.664E-07	1.321E-07	6.299E-08	3.907E-08	2.761E-08	1.544E-08	7.671E-09	4.552E-09	3.032E-09	2.185E-09
NNE	7.508E-07	2.475E-07	1.096E-07	6.769E-08	4.821E-08	2.480E-08	1.069E-08	5.903E-09	3.994E-09	2.987E-09
NE	6.228E-07	2.370E-07	1.129E-07	6.931E-08	4.827E-08	2.506E-08	1.099E-08	6.135E-09	4.183E-09	3.150E-09
ENE	3.795E-07	1.704E-07	9.436E-08	6.200E-08	4.488E-08	2.461E-08	1.156E-08	6.769E-09	4.764E-09	3.678E-09
E	2.904E-07	1.271E-07	7.159E-08	4.796E-08	3.530E-08	1.970E-08	9.378E-09	5.484E-09	3.814E-09	2.899E-09
ESE	2.973E-07	1.284E-07	7.397E-08	5.047E-08	3.765E-08	2.167E-08	1.088E-08	6.670E-09	4.804E-09	3.760E-09
SE	2.591E-07	1.130E-07	6.445E-08	4.319E-08	3.170E-08	1.772E-08	8.539E-09	5.086E-09	3.612E-09	2.804E-09
SSE	2.872E-07	1.151E-07	5.954E-08	3.808E-08	2.718E-08	1.510E-08	7.612E-09	4.895E-09	3.685E-09	2.924E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50

S	8.079E+01	8.088E+01	8.088E+01	8.088E+01	8.088E+01	7.783E+01	6.977E+01	6.022E+01	5.041E+01	4.051E+01
SSW	8.029E+01	7.996E+01	7.996E+01	7.996E+01	7.996E+01	7.759E+01	7.132E+01	6.389E+01	5.626E+01	4.856E+01
SW	7.804E+01	7.736E+01	7.736E+01	7.736E+01	7.736E+01	7.512E+01	6.921E+01	6.221E+01	5.501E+01	4.776E+01
WSW	7.532E+01	7.452E+01	7.452E+01	7.452E+01	7.291E+01	6.746E+01	5.674E+01	4.402E+01	3.096E+01	1.795E+01
W	6.862E+01	6.730E+01	6.730E+01	6.730E+01	6.730E+01	5.760E+01	3.202E+01	7.737E+00	8.830E-01	4.783E-01
WNW	7.149E+01	6.996E+01	6.996E+01	6.996E+01	6.996E+01	5.869E+01	2.903E+01	5.308E+00	5.987E-01	3.742E-01
NW	7.405E+01	7.272E+01	7.272E+01	7.272E+01	7.218E+01	6.405E+01	4.382E+01	2.006E+01	4.213E+00	8.595E-01
NNW	7.541E+01	7.450E+01	7.450E+01	7.450E+01	7.342E+01	6.219E+01	3.500E+01	9.064E+00	1.531E+00	9.223E-01
N	7.626E+01	7.555E+01	7.555E+01	7.555E+01	7.501E+01	6.613E+01	4.394E+01	1.836E+01	3.820E+00	1.430E+00
NNE	7.590E+01	7.595E+01	7.595E+01	7.376E+01	7.141E+01	6.980E+01	6.676E+01	6.315E+01	5.944E+01	5.571E+01
NE	7.801E+01	7.806E+01	7.806E+01	7.806E+01	7.806E+01	7.657E+01	7.263E+01	6.797E+01	6.318E+01	5.835E+01
ENE	8.440E+01	8.449E+01	8.449E+01	8.449E+01	8.449E+01	8.300E+01	7.906E+01	7.439E+01	6.960E+01	6.477E+01
E	8.796E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01
ESE	8.614E+01	8.631E+01	8.631E+01	8.631E+01	8.631E+01	8.584E+01	8.459E+01	8.310E+01	8.158E+01	8.004E+01
SE	8.606E+01	8.619E+01	8.619E+01	8.619E+01	8.619E+01	8.524E+01	8.274E+01	7.976E+01	7.671E+01	7.363E+01
SSE	8.324E+01	8.334E+01	8.334E+01	8.334E+01	8.334E+01	7.872E+01	6.655E+01	5.211E+01	3.729E+01	2.238E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.266E-06	4.580E-07	2.867E-07	1.768E-07	9.938E-08	6.725E-08	4.963E-08	3.866E-08	3.128E-08	2.603E-08	2.215E-08
SSW	9.084E-07	3.433E-07	2.287E-07	1.506E-07	8.925E-08	6.112E-08	4.504E-08	3.488E-08	2.802E-08	2.315E-08	1.955E-08
SW	1.184E-06	4.503E-07	3.108E-07	2.064E-07	1.159E-07	7.528E-08	5.324E-08	3.994E-08	3.128E-08	2.532E-08	2.102E-08
WSW	1.247E-06	4.703E-07	3.052E-07	1.904E-07	9.994E-08	6.267E-08	4.344E-08	3.216E-08	2.497E-08	2.007E-08	1.679E-08
W	1.658E-06	5.680E-07	3.516E-07	2.139E-07	1.086E-07	6.726E-08	4.636E-08	3.426E-08	2.658E-08	2.138E-08	1.768E-08
WNW	1.916E-06	6.232E-07	3.708E-07	2.281E-07	1.202E-07	7.621E-08	5.339E-08	3.993E-08	3.128E-08	2.536E-08	2.111E-08
NW	1.929E-06	6.043E-07	3.394E-07	2.027E-07	1.066E-07	6.802E-08	4.798E-08	3.611E-08	2.845E-08	2.319E-08	1.950E-08
NNW	1.778E-06	5.690E-07	3.212E-07	1.894E-07	1.003E-07	6.514E-08	4.676E-08	3.573E-08	2.850E-08	2.347E-08	2.006E-08
N	1.852E-06	6.239E-07	3.744E-07	2.306E-07	1.278E-07	8.524E-08	6.221E-08	4.806E-08	3.863E-08	3.199E-08	2.728E-08
NNE	3.750E-06	1.299E-06	7.773E-07	4.550E-07	2.356E-07	1.513E-07	1.079E-07	8.211E-08	6.703E-08	5.640E-08	4.767E-08
NE	2.611E-06	9.975E-07	6.531E-07	4.112E-07	2.306E-07	1.535E-07	1.115E-07	8.568E-08	6.854E-08	5.651E-08	4.769E-08
ENE	1.518E-06	5.885E-07	3.919E-07	2.646E-07	1.697E-07	1.226E-07	9.379E-08	7.471E-08	6.137E-08	5.163E-08	4.428E-08
E	1.215E-06	4.661E-07	2.972E-07	1.965E-07	1.263E-07	9.200E-08	7.112E-08	5.722E-08	4.743E-08	4.023E-08	3.476E-08
ESE	1.360E-06	4.909E-07	3.011E-07	1.967E-07	1.274E-07	9.405E-08	7.354E-08	5.975E-08	4.993E-08	4.266E-08	3.709E-08
SE	1.188E-06	4.261E-07	2.617E-07	1.726E-07	1.126E-07	8.269E-08	6.410E-08	5.160E-08	4.274E-08	3.622E-08	3.126E-08
SSE	1.305E-06	4.697E-07	2.953E-07	1.890E-07	1.132E-07	7.885E-08	5.902E-08	4.634E-08	3.768E-08	3.147E-08	2.684E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.918E-08	1.175E-08	8.456E-09	5.518E-09	4.061E-09	3.196E-09	2.625E-09	2.220E-09	1.916E-09	1.678E-09	1.487E-09
SSW	1.682E-08	9.909E-09	6.910E-09	4.297E-09	3.046E-09	2.324E-09	1.858E-09	1.535E-09	1.299E-09	1.119E-09	9.784E-10
SW	1.782E-08	9.904E-09	6.654E-09	3.939E-09	2.700E-09	2.008E-09	1.573E-09	1.277E-09	1.065E-09	9.059E-10	7.832E-10
WSW	1.433E-08	7.919E-09	5.321E-09	3.167E-09	2.186E-09	1.634E-09	1.286E-09	1.047E-09	8.738E-10	7.431E-10	6.410E-10
W	1.495E-08	8.630E-09	5.998E-09	3.743E-09	2.641E-09	1.971E-09	1.531E-09	1.234E-09	1.024E-09	8.675E-10	7.479E-10
WNW	1.796E-08	1.086E-08	7.865E-09	5.241E-09	3.818E-09	2.857E-09	2.227E-09	1.802E-09	1.499E-09	1.274E-09	1.101E-09
NW	1.674E-08	1.010E-08	7.292E-09	4.865E-09	3.636E-09	2.850E-09	2.280E-09	1.856E-09	1.550E-09	1.320E-09	1.144E-09
NNW	1.748E-08	1.115E-08	8.339E-09	5.738E-09	4.264E-09	3.244E-09	2.536E-09	2.052E-09	1.707E-09	1.451E-09	1.253E-09
N	2.369E-08	1.498E-08	1.104E-08	7.413E-09	5.491E-09	4.257E-09	3.373E-09	2.726E-09	2.257E-09	1.908E-09	1.640E-09
NNE	4.110E-08	2.386E-08	1.657E-08	1.029E-08	7.298E-09	5.569E-09	4.455E-09	3.683E-09	3.119E-09	2.691E-09	2.357E-09
NE	4.102E-08	2.413E-08	1.686E-08	1.053E-08	7.486E-09	5.721E-09	4.581E-09	3.789E-09	3.211E-09	2.771E-09	2.426E-09

ENE	3.860E-08	2.377E-08	1.706E-08	1.101E-08	7.994E-09	6.208E-09	5.036E-09	4.212E-09	3.603E-09	3.136E-09	2.767E-09
E	3.051E-08	1.898E-08	1.370E-08	8.870E-09	6.424E-09	4.958E-09	3.989E-09	3.304E-09	2.798E-09	2.409E-09	2.103E-09
ESE	3.274E-08	2.095E-08	1.545E-08	1.034E-08	7.682E-09	6.060E-09	4.971E-09	4.191E-09	3.606E-09	3.152E-09	2.791E-09
SE	2.740E-08	1.713E-08	1.242E-08	8.123E-09	5.950E-09	4.647E-09	3.786E-09	3.176E-09	2.723E-09	2.375E-09	2.099E-09
SSE	2.329E-08	1.460E-08	1.072E-08	7.282E-09	5.568E-09	4.532E-09	3.824E-09	3.295E-09	2.874E-09	2.523E-09	2.220E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.759E-07	1.023E-07	4.994E-08	3.139E-08	2.220E-08	1.194E-08	5.523E-09	3.199E-09	2.220E-09	1.678E-09
SSW	2.195E-07	9.038E-08	4.526E-08	2.812E-08	1.961E-08	1.011E-08	4.322E-09	2.330E-09	1.537E-09	1.120E-09
SW	2.954E-07	1.180E-07	5.380E-08	3.148E-08	2.110E-08	1.022E-08	3.992E-09	2.018E-09	1.281E-09	9.075E-10
WSW	2.909E-07	1.035E-07	4.406E-08	2.516E-08	1.685E-08	8.189E-09	3.209E-09	1.642E-09	1.049E-09	7.440E-10
W	3.385E-07	1.136E-07	4.709E-08	2.679E-08	1.777E-08	8.865E-09	3.754E-09	1.974E-09	1.239E-09	8.695E-10
WNW	3.635E-07	1.246E-07	5.409E-08	3.150E-08	2.120E-08	1.111E-08	5.192E-09	2.861E-09	1.808E-09	1.277E-09
NW	3.375E-07	1.108E-07	4.857E-08	2.863E-08	1.957E-08	1.033E-08	4.858E-09	2.831E-09	1.860E-09	1.323E-09
NNW	3.177E-07	1.045E-07	4.725E-08	2.865E-08	2.012E-08	1.131E-08	5.661E-09	3.233E-09	2.059E-09	1.454E-09
N	3.659E-07	1.317E-07	6.269E-08	3.879E-08	2.735E-08	1.516E-08	7.364E-09	4.232E-09	2.732E-09	1.912E-09
NNE	7.500E-07	2.469E-07	1.092E-07	6.729E-08	4.782E-08	2.445E-08	1.036E-08	5.584E-09	3.688E-09	2.694E-09
NE	6.221E-07	2.364E-07	1.124E-07	6.885E-08	4.783E-08	2.465E-08	1.058E-08	5.736E-09	3.795E-09	2.774E-09
ENE	3.790E-07	1.699E-07	9.384E-08	6.147E-08	4.436E-08	2.408E-08	1.101E-08	6.215E-09	4.216E-09	3.138E-09
E	2.900E-07	1.266E-07	7.113E-08	4.748E-08	3.481E-08	1.920E-08	8.857E-09	4.962E-09	3.307E-09	2.411E-09
ESE	2.969E-07	1.280E-07	7.349E-08	4.997E-08	3.713E-08	2.113E-08	1.029E-08	6.057E-09	4.191E-09	3.153E-09
SE	2.587E-07	1.126E-07	6.406E-08	4.279E-08	3.130E-08	1.732E-08	8.112E-09	4.650E-09	3.178E-09	2.376E-09
SSE	2.868E-07	1.148E-07	5.924E-08	3.779E-08	2.690E-08	1.481E-08	7.284E-09	4.525E-09	3.286E-09	2.515E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.209E-06	4.267E-07	2.648E-07	1.636E-07	9.247E-08	6.268E-08	4.626E-08	3.602E-08	2.911E-08	2.421E-08	2.057E-08
SSW	8.689E-07	3.206E-07	2.127E-07	1.409E-07	8.410E-08	5.766E-08	4.246E-08	3.283E-08	2.632E-08	2.171E-08	1.830E-08
SW	1.134E-06	4.213E-07	2.903E-07	1.939E-07	1.091E-07	7.060E-08	4.971E-08	3.712E-08	2.895E-08	2.333E-08	1.929E-08

WSW	1.197E-06	4.412E-07	2.847E-07	1.780E-07	9.327E-08	5.823E-08	4.015E-08	2.959E-08	2.286E-08	1.830E-08	1.525E-08
W	1.588E-06	5.294E-07	3.249E-07	1.977E-07	1.001E-07	6.165E-08	4.226E-08	3.107E-08	2.398E-08	1.920E-08	1.581E-08
WNW	1.845E-06	5.844E-07	3.441E-07	2.118E-07	1.115E-07	7.043E-08	4.913E-08	3.659E-08	2.855E-08	2.306E-08	1.913E-08
NW	1.862E-06	5.683E-07	3.148E-07	1.877E-07	9.861E-08	6.267E-08	4.403E-08	3.301E-08	2.591E-08	2.105E-08	1.765E-08
NNW	1.709E-06	5.323E-07	2.961E-07	1.745E-07	9.257E-08	6.012E-08	4.310E-08	3.288E-08	2.619E-08	2.153E-08	1.840E-08
N	1.774E-06	5.810E-07	3.444E-07	2.127E-07	1.186E-07	7.928E-08	5.789E-08	4.470E-08	3.591E-08	2.971E-08	2.533E-08
NNE	3.579E-06	1.204E-06	7.112E-07	4.157E-07	2.156E-07	1.385E-07	9.870E-08	7.498E-08	6.127E-08	5.158E-08	4.356E-08
NE	2.494E-06	9.303E-07	6.059E-07	3.828E-07	2.156E-07	1.435E-07	1.041E-07	7.987E-08	6.378E-08	5.249E-08	4.423E-08
ENE	1.460E-06	5.551E-07	3.681E-07	2.502E-07	1.618E-07	1.171E-07	8.964E-08	7.137E-08	5.857E-08	4.924E-08	4.220E-08
E	1.175E-06	4.426E-07	2.802E-07	1.861E-07	1.205E-07	8.803E-08	6.808E-08	5.477E-08	4.539E-08	3.849E-08	3.325E-08
ESE	1.316E-06	4.657E-07	2.831E-07	1.858E-07	1.214E-07	8.998E-08	7.047E-08	5.729E-08	4.790E-08	4.094E-08	3.561E-08
SE	1.150E-06	4.043E-07	2.461E-07	1.632E-07	1.074E-07	7.915E-08	6.141E-08	4.943E-08	4.094E-08	3.468E-08	2.992E-08
SSE	1.254E-06	4.410E-07	2.751E-07	1.769E-07	1.067E-07	7.446E-08	5.572E-08	4.371E-08	3.549E-08	2.960E-08	2.521E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.780E-08	1.090E-08	7.846E-09	5.142E-09	3.810E-09	3.023E-09	2.503E-09	2.121E-09	1.813E-09	1.568E-09	1.371E-09
SSW	1.571E-08	9.211E-09	6.405E-09	3.976E-09	2.823E-09	2.161E-09	1.736E-09	1.441E-09	1.218E-09	1.043E-09	9.029E-10
SW	1.629E-08	8.930E-09	5.937E-09	3.465E-09	2.355E-09	1.742E-09	1.360E-09	1.099E-09	9.086E-10	7.646E-10	6.524E-10
WSW	1.298E-08	7.074E-09	4.704E-09	2.758E-09	1.875E-09	1.368E-09	1.047E-09	8.300E-10	6.759E-10	5.626E-10	4.766E-10
W	1.332E-08	7.616E-09	5.254E-09	3.174E-09	2.130E-09	1.535E-09	1.159E-09	9.108E-10	7.383E-10	6.128E-10	5.182E-10
WNW	1.622E-08	9.770E-09	7.053E-09	4.545E-09	3.158E-09	2.292E-09	1.740E-09	1.374E-09	1.119E-09	9.332E-10	7.923E-10
NW	1.511E-08	9.073E-09	6.532E-09	4.274E-09	3.045E-09	2.287E-09	1.779E-09	1.414E-09	1.156E-09	9.653E-10	8.211E-10
NNW	1.602E-08	1.026E-08	7.686E-09	5.156E-09	3.639E-09	2.681E-09	2.044E-09	1.618E-09	1.320E-09	1.101E-09	9.358E-10
N	2.199E-08	1.395E-08	1.032E-08	6.896E-09	4.903E-09	3.658E-09	2.830E-09	2.243E-09	1.826E-09	1.521E-09	1.289E-09
NNE	3.752E-08	2.170E-08	1.502E-08	9.306E-09	6.597E-09	5.042E-09	4.044E-09	3.352E-09	2.836E-09	2.447E-09	2.138E-09
NE	3.799E-08	2.226E-08	1.553E-08	9.699E-09	6.918E-09	5.314E-09	4.281E-09	3.563E-09	3.027E-09	2.622E-09	2.301E-09
ENE	3.677E-08	2.262E-08	1.625E-08	1.055E-08	7.724E-09	6.057E-09	4.965E-09	4.195E-09	3.612E-09	3.167E-09	2.810E-09
E	2.918E-08	1.817E-08	1.315E-08	8.578E-09	6.270E-09	4.890E-09	3.977E-09	3.330E-09	2.844E-09	2.472E-09	2.174E-09
ESE	3.143E-08	2.018E-08	1.494E-08	1.010E-08	7.586E-09	6.055E-09	5.027E-09	4.289E-09	3.719E-09	3.280E-09	2.923E-09
SE	2.621E-08	1.640E-08	1.192E-08	7.849E-09	5.800E-09	4.575E-09	3.768E-09	3.194E-09	2.757E-09	2.423E-09	2.154E-09
SSE	2.186E-08	1.370E-08	1.008E-08	6.901E-09	5.337E-09	4.384E-09	3.665E-09	3.103E-09	2.662E-09	2.301E-09	2.005E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.558E-07	9.504E-08	4.654E-08	2.922E-08	2.062E-08	1.108E-08	5.151E-09	3.025E-09	2.113E-09	1.568E-09
SSW	2.048E-07	8.497E-08	4.266E-08	2.642E-08	1.835E-08	9.409E-09	4.003E-09	2.167E-09	1.440E-09	1.043E-09
SW	2.765E-07	1.108E-07	5.025E-08	2.914E-08	1.938E-08	9.235E-09	3.521E-09	1.753E-09	1.101E-09	7.657E-10
WSW	2.721E-07	9.652E-08	4.075E-08	2.304E-08	1.531E-08	7.333E-09	2.798E-09	1.375E-09	8.334E-10	5.643E-10
W	3.138E-07	1.047E-07	4.295E-08	2.419E-08	1.589E-08	7.833E-09	3.172E-09	1.543E-09	9.159E-10	6.149E-10

WNW	3.387E-07	1.155E-07	4.979E-08	2.875E-08	1.922E-08	9.996E-09	4.486E-09	2.302E-09	1.382E-09	9.362E-10
NW	3.146E-07	1.024E-07	4.460E-08	2.609E-08	1.772E-08	9.286E-09	4.229E-09	2.286E-09	1.420E-09	9.683E-10
NNW	2.945E-07	9.635E-08	4.355E-08	2.633E-08	1.844E-08	1.039E-08	5.044E-09	2.682E-09	1.626E-09	1.105E-09
N	3.384E-07	1.220E-07	5.832E-08	3.606E-08	2.539E-08	1.412E-08	6.770E-09	3.659E-09	2.252E-09	1.526E-09
NNE	6.894E-07	2.258E-07	9.983E-08	6.150E-08	4.370E-08	2.225E-08	9.373E-09	5.058E-09	3.353E-09	2.448E-09
NE	5.789E-07	2.207E-07	1.049E-07	6.408E-08	4.437E-08	2.276E-08	9.758E-09	5.328E-09	3.564E-09	2.623E-09
ENE	3.573E-07	1.616E-07	8.967E-08	5.867E-08	4.227E-08	2.294E-08	1.056E-08	6.064E-09	4.193E-09	3.167E-09
E	2.745E-07	1.207E-07	6.808E-08	4.544E-08	3.330E-08	1.839E-08	8.568E-09	4.893E-09	3.329E-09	2.472E-09
ESE	2.804E-07	1.218E-07	7.040E-08	4.793E-08	3.564E-08	2.035E-08	1.006E-08	6.052E-09	4.283E-09	3.278E-09
SE	2.444E-07	1.072E-07	6.135E-08	4.098E-08	2.996E-08	1.659E-08	7.842E-09	4.579E-09	3.191E-09	2.422E-09
SSE	2.683E-07	1.080E-07	5.591E-08	3.560E-08	2.527E-08	1.390E-08	6.911E-09	4.350E-09	3.095E-09	2.298E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.752E-08	8.998E-09	5.606E-09	3.040E-09	1.238E-09	6.640E-10	4.120E-10	2.805E-10	2.033E-10	1.541E-10	1.208E-10
SSW	1.369E-08	7.172E-09	4.561E-09	2.521E-09	1.045E-09	5.684E-10	3.561E-10	2.440E-10	1.775E-10	1.349E-10	1.058E-10
SW	1.909E-08	1.033E-08	6.667E-09	3.696E-09	1.539E-09	8.311E-10	5.176E-10	3.532E-10	2.563E-10	1.944E-10	1.525E-10
WSW	2.441E-08	1.254E-08	7.600E-09	4.023E-09	1.605E-09	8.466E-10	5.192E-10	3.508E-10	2.530E-10	1.912E-10	1.530E-10
W	3.074E-08	1.474E-08	8.606E-09	4.607E-09	1.812E-09	9.411E-10	5.710E-10	3.828E-10	2.746E-10	2.067E-10	1.615E-10
WNW	3.163E-08	1.607E-08	9.426E-09	5.086E-09	1.977E-09	1.027E-09	6.239E-10	4.189E-10	3.009E-10	2.270E-10	1.775E-10
NW	2.834E-08	1.493E-08	8.824E-09	4.762E-09	1.831E-09	9.489E-10	5.762E-10	3.868E-10	2.780E-10	2.097E-10	1.642E-10
NNW	2.400E-08	1.217E-08	7.088E-09	3.622E-09	1.370E-09	7.153E-10	4.373E-10	2.953E-10	2.132E-10	1.614E-10	1.266E-10
N	2.232E-08	1.118E-08	6.746E-09	3.545E-09	1.381E-09	7.297E-10	4.492E-10	3.045E-10	2.202E-10	1.668E-10	1.308E-10
NNE	5.180E-08	2.449E-08	1.436E-08	7.455E-09	2.922E-09	1.530E-09	9.348E-10	6.299E-10	4.534E-10	3.421E-10	2.676E-10
NE	4.771E-08	2.419E-08	1.498E-08	8.114E-09	3.326E-09	1.778E-09	1.100E-09	7.475E-10	5.407E-10	4.093E-10	3.206E-10
ENE	2.867E-08	1.555E-08	9.771E-09	5.380E-09	2.223E-09	1.215E-09	7.646E-10	5.257E-10	3.835E-10	2.919E-10	2.294E-10
E	2.390E-08	1.327E-08	8.309E-09	4.517E-09	1.826E-09	9.904E-10	6.208E-10	4.260E-10	3.105E-10	2.363E-10	1.859E-10
ESE	2.557E-08	1.409E-08	8.727E-09	4.693E-09	1.872E-09	1.009E-09	6.298E-10	4.311E-10	3.138E-10	2.387E-10	1.877E-10
SE	2.168E-08	1.199E-08	7.423E-09	3.997E-09	1.596E-09	8.629E-10	5.401E-10	3.704E-10	2.699E-10	2.055E-10	1.617E-10
SSE	2.108E-08	1.121E-08	6.939E-09	3.760E-09	1.524E-09	8.255E-10	5.166E-10	3.539E-10	2.576E-10	1.959E-10	1.539E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.726E-11	4.493E-11	2.715E-11	1.419E-11	9.037E-12	6.607E-12	6.134E-12	7.629E-12	7.283E-12	6.151E-12	5.001E-12
SSW	8.524E-11	3.952E-11	2.391E-11	1.251E-11	7.929E-12	5.684E-12	4.484E-12	4.050E-12	4.494E-12	4.430E-12	4.004E-12
SW	1.227E-10	5.660E-11	3.454E-11	1.765E-11	1.113E-11	7.951E-12	6.223E-12	5.695E-12	5.721E-12	4.887E-12	4.211E-12
WSW	1.231E-10	5.613E-11	3.370E-11	1.898E-11	1.432E-11	1.245E-11	9.353E-12	7.159E-12	5.546E-12	4.393E-12	3.607E-12
W	1.298E-10	5.943E-11	3.934E-11	3.048E-11	1.957E-11	1.324E-11	9.717E-12	7.298E-12	5.686E-12	4.543E-12	3.708E-12
WNW	1.429E-10	6.657E-11	5.132E-11	3.760E-11	2.329E-11	1.603E-11	1.157E-11	8.711E-12	6.774E-12	5.412E-12	4.420E-12
NW	1.322E-10	6.092E-11	4.005E-11	3.535E-11	2.408E-11	1.578E-11	1.101E-11	8.302E-12	6.445E-12	5.151E-12	4.205E-12
NNW	1.051E-10	4.843E-11	3.907E-11	3.534E-11	2.160E-11	1.403E-11	1.013E-11	7.630E-12	5.935E-12	4.743E-12	3.872E-12
N	1.054E-10	4.990E-11	3.141E-11	3.881E-11	2.828E-11	1.727E-11	1.202E-11	9.071E-12	7.051E-12	5.652E-12	4.615E-12
NNE	2.152E-10	9.890E-11	6.029E-11	3.139E-11	2.003E-11	1.437E-11	1.124E-11	9.116E-12	8.075E-12	8.000E-12	6.854E-12
NE	2.579E-10	1.184E-10	7.125E-11	3.688E-11	2.341E-11	1.662E-11	1.269E-11	1.019E-11	8.470E-12	7.325E-12	6.564E-12
ENE	1.850E-10	8.626E-11	5.250E-11	2.764E-11	1.775E-11	1.276E-11	9.867E-12	7.995E-12	6.717E-12	5.768E-12	5.091E-12
E	1.500E-10	7.029E-11	4.297E-11	2.279E-11	1.461E-11	1.069E-11	8.310E-12	6.720E-12	5.607E-12	4.765E-12	4.130E-12
ESE	1.515E-10	7.102E-11	4.348E-11	2.314E-11	1.489E-11	1.098E-11	8.621E-12	7.060E-12	6.025E-12	5.199E-12	4.554E-12
SE	1.305E-10	6.132E-11	3.761E-11	2.006E-11	1.291E-11	9.527E-12	7.388E-12	6.030E-12	5.100E-12	4.386E-12	3.852E-12
SSE	1.241E-10	5.791E-11	3.587E-11	1.876E-11	1.246E-11	1.458E-11	1.496E-11	1.161E-11	9.004E-12	6.837E-12	5.266E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

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******************     RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS     *****************
                                          SEGMENT BOUNDARIES IN MILES
DIRECTION .5-1      1-2        2-3        3-4        4-5       5-10       10-20      20-30      30-40      40-50
 FROM SITE
    S 5.219E-09 1.383E-09 4.266E-10 2.066E-10 1.219E-10 4.866E-11 1.478E-11 7.065E-12 7.070E-12 6.060E-12
  SSW 4.235E-09 1.161E-09 3.679E-10 1.802E-10 1.068E-10 4.274E-11 1.301E-11 5.803E-12 4.343E-12 4.291E-12
   SW 6.160E-09 1.704E-09 5.355E-10 2.604E-10 1.539E-10 6.149E-11 1.851E-11 8.109E-12 5.856E-12 4.883E-12
  WSW 7.108E-09 1.805E-09 5.391E-10 2.574E-10 1.532E-10 6.104E-11 2.018E-11 1.171E-11 7.171E-12 4.444E-12
    W 8.192E-09 2.046E-09 5.944E-10 2.796E-10 1.631E-10 6.613E-11 2.760E-11 1.352E-11 7.375E-12 4.572E-12
  WNW 8.974E-09 2.245E-09 6.493E-10 3.065E-10 1.793E-10 7.675E-11 3.429E-11 1.618E-11 8.790E-12 5.448E-12
   NW 8.375E-09 2.090E-09 5.998E-10 2.831E-10 1.659E-10 6.749E-11 3.139E-11 1.608E-11 8.368E-12 5.184E-12
  NNW 6.677E-09 1.580E-09 4.547E-10 2.169E-10 1.290E-10 5.686E-11 3.006E-11 1.449E-11 7.700E-12 4.774E-12
    N 6.308E-09 1.572E-09 4.661E-10 2.239E-10 1.321E-10 5.402E-11 3.249E-11 1.810E-11 9.144E-12 5.683E-12
  NNE 1.354E-08 3.311E-09 9.715E-10 4.614E-10 2.703E-10 1.076E-10 3.276E-11 1.463E-11 9.325E-12 7.598E-12
   NE 1.398E-08 3.702E-09 1.140E-09 5.497E-10 3.236E-10 1.285E-10 3.853E-11 1.686E-11 1.025E-11 7.382E-12
  ENE 9.104E-09 2.476E-09 7.891E-10 3.892E-10 2.315E-10 9.320E-11 2.877E-11 1.293E-11 8.043E-12 5.798E-12
    E 7.726E-09 2.053E-09 6.414E-10 3.152E-10 1.875E-10 7.586E-11 2.364E-11 1.078E-11 6.751E-12 4.779E-12
  ESE 8.126E-09 2.115E-09 6.514E-10 3.187E-10 1.894E-10 7.666E-11 2.399E-11 1.108E-11 7.112E-12 5.205E-12
   SE 6.915E-09 1.804E-09 5.583E-10 2.741E-10 1.631E-10 6.616E-11 2.078E-11 9.573E-12 6.064E-12 4.400E-12
  SSE 6.476E-09 1.711E-09 5.339E-10 2.616E-10 1.553E-10 6.283E-11 1.976E-11 1.416E-11 1.157E-11 6.897E-12

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   52.62                    REP. WIND HEIGHT       (METERS)       52.6
     DIAMETER        (METERS)    2.40                    BUILDING HEIGHT        (METERS)       48.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)      /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                  /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556             /      ELEVATED        LESS THAN  1.550              LESS THAN  2.348
     MIXED           BETWEEN    3.556 AND 17.780  /      MIXED           BETWEEN    1.550 AND  7.751   BETWEEN    2.348 AND 11.739
     GROUND LEVEL    ABOVE     17.780             /      GROUND LEVEL    ABOVE      7.751              ABOVE     11.739
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    10:31
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0Fermi COL A (with Staff JFD)

0Reactor Bldg/Fuel Bldg Stack

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 CORRECTED USING STANDARD OPEN TERRAIN FACTORS
 SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF  DIRECTION DIST.  X/Q       X/Q       X/Q       D/Q
  ID    LOCATION FROM SITE (MI) (SEC/M3)  (SEC/M3)  (SEC/M3) (PER SQ.METER)
                  NO DECAY
+                              2.260 DAY DECAY
+                                                 8.000 DAY DECAY
                 UNDEPLETED      UNDEPLETED        DEPLETED
     Site Boundary   S    .70   3.0E-07   3.0E-07   2.8E-07   6.1E-09
     Site Boundary SSW    .72   2.3E-07   2.3E-07   2.2E-07   4.8E-09
     Site Boundary  SW    .90   2.4E-07   2.4E-07   2.2E-07   4.6E-09
     Site Boundary WSW    .80   2.7E-07   2.7E-07   2.5E-07   6.7E-09
     Site Boundary   W    .59   4.5E-07   4.5E-07   4.2E-07   1.2E-08
     Site Boundary WNW    .57   5.0E-07   5.0E-07   4.6E-07   1.4E-08
     Site Boundary  NW    .57   4.7E-07   4.7E-07   4.4E-07   1.3E-08
     Site Boundary NNW    .57   4.5E-07   4.5E-07   4.2E-07   1.0E-08
     Site Boundary   N    .66   4.3E-07   4.2E-07   3.9E-07   8.0E-09
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Site Boundary	NNE	.95	4.9E-07	4.9E-07	4.5E-07	8.4E-09
Site Boundary	NE	1.28	2.9E-07	2.9E-07	2.7E-07	4.8E-09
Site Boundary	SSE	.70	3.1E-07	3.1E-07	2.9E-07	7.5E-09
Residence	SSE	.92	2.1E-07	2.1E-07	2.0E-07	4.5E-09
Residence	SSW	.90	1.7E-07	1.7E-07	1.6E-07	3.2E-09
Residence	SW	1.00	2.1E-07	2.1E-07	1.9E-07	3.7E-09
Residence	WSW	1.13	1.6E-07	1.6E-07	1.5E-07	3.0E-09
Residence	W	.98	2.2E-07	2.2E-07	2.0E-07	4.9E-09
Residence	NW	.69	3.7E-07	3.7E-07	3.4E-07	9.9E-09
Residence	NW	1.07	1.8E-07	1.8E-07	1.7E-07	4.1E-09
Residence	NNW	1.19	1.4E-07	1.4E-07	1.3E-07	2.4E-09
Residence	NNE	1.32	2.9E-07	2.9E-07	2.6E-07	3.9E-09
Residence	NNE	1.31	2.9E-07	2.9E-07	2.7E-07	4.0E-09
Residence	NE	1.36	2.7E-07	2.7E-07	2.5E-07	4.2E-09
Garden	S	1.28	1.2E-07	1.2E-07	1.1E-07	1.7E-09
Garden	WSW	2.14	5.6E-08	5.6E-08	5.2E-08	7.3E-10
Garden	W	1.50	1.1E-07	1.1E-07	9.9E-08	1.8E-09
Garden	NW	.69	3.7E-07	3.7E-07	3.4E-07	9.9E-09
Garden	NNW	1.09	1.6E-07	1.6E-07	1.5E-07	2.9E-09
Garden	NNW	1.46	1.0E-07	1.0E-07	9.6E-08	1.5E-09
Garden	N	2.31	7.0E-08	6.9E-08	6.5E-08	5.3E-10
Garden	NNE	2.16	1.3E-07	1.3E-07	1.2E-07	1.3E-09
Garden	NE	2.24	1.3E-07	1.3E-07	1.2E-07	1.4E-09
Sheep	NNW	4.46	2.0E-08	2.0E-08	1.9E-08	1.3E-10
Sheep	NNE	4.50	4.8E-08	4.8E-08	4.4E-08	2.7E-10
Goat	WNW	2.30	6.1E-08	6.1E-08	5.6E-08	7.5E-10
Goat	NNW	3.08	3.4E-08	3.4E-08	3.2E-08	2.8E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.546E-06	5.314E-07	3.036E-07	1.723E-07	8.825E-08	5.771E-08	4.198E-08	3.250E-08	2.622E-08	2.180E-08	1.854E-08
SSW	1.095E-06	3.900E-07	2.325E-07	1.380E-07	7.495E-08	5.035E-08	3.704E-08	2.877E-08	2.320E-08	1.924E-08	1.632E-08
SW	1.311E-06	4.749E-07	2.882E-07	1.755E-07	9.531E-08	6.233E-08	4.460E-08	3.381E-08	2.671E-08	2.177E-08	1.818E-08
WSW	1.345E-06	4.859E-07	2.846E-07	1.656E-07	8.432E-08	5.305E-08	3.707E-08	2.767E-08	2.163E-08	1.750E-08	1.469E-08
W	1.871E-06	6.230E-07	3.526E-07	1.994E-07	9.692E-08	5.959E-08	4.112E-08	3.048E-08	2.372E-08	1.914E-08	1.587E-08
WNW	2.120E-06	6.822E-07	3.727E-07	2.106E-07	1.050E-07	6.595E-08	4.621E-08	3.464E-08	2.721E-08	2.212E-08	1.846E-08
NW	2.133E-06	6.699E-07	3.510E-07	1.934E-07	9.532E-08	5.984E-08	4.204E-08	3.163E-08	2.493E-08	2.034E-08	1.710E-08

NNW	2.027E-06	6.454E-07	3.430E-07	1.872E-07	9.095E-08	5.717E-08	4.044E-08	3.068E-08	2.440E-08	2.006E-08	1.709E-08
N	2.204E-06	7.263E-07	4.031E-07	2.256E-07	1.130E-07	7.268E-08	5.228E-08	4.015E-08	3.221E-08	2.667E-08	2.274E-08
NNE	4.433E-06	1.486E-06	8.350E-07	4.570E-07	2.176E-07	1.350E-07	9.482E-08	7.158E-08	5.784E-08	4.833E-08	4.081E-08
NE	3.072E-06	1.107E-06	6.550E-07	3.785E-07	1.966E-07	1.282E-07	9.258E-08	7.109E-08	5.693E-08	4.701E-08	3.975E-08
ENE	1.790E-06	6.584E-07	3.907E-07	2.345E-07	1.356E-07	9.576E-08	7.309E-08	5.838E-08	4.814E-08	4.067E-08	3.503E-08
E	1.354E-06	5.036E-07	2.909E-07	1.726E-07	1.004E-07	7.148E-08	5.502E-08	4.432E-08	3.682E-08	3.132E-08	2.714E-08
ESE	1.543E-06	5.458E-07	3.049E-07	1.775E-07	1.020E-07	7.270E-08	5.627E-08	4.560E-08	3.811E-08	3.259E-08	2.838E-08
SE	1.364E-06	4.811E-07	2.698E-07	1.575E-07	9.076E-08	6.455E-08	4.969E-08	4.001E-08	3.323E-08	2.824E-08	2.445E-08
SSE	1.574E-06	5.452E-07	3.114E-07	1.798E-07	9.715E-08	6.568E-08	4.874E-08	3.818E-08	3.105E-08	2.595E-08	2.216E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.607E-08	9.863E-09	7.131E-09	4.710E-09	3.515E-09	2.807E-09	2.343E-09	2.015E-09	1.772E-09	1.583E-09	1.432E-09
SSW	1.409E-08	8.416E-09	5.937E-09	3.764E-09	2.715E-09	2.105E-09	1.711E-09	1.436E-09	1.235E-09	1.082E-09	9.613E-10
SW	1.549E-08	8.767E-09	5.963E-09	3.597E-09	2.506E-09	1.891E-09	1.502E-09	1.237E-09	1.046E-09	9.018E-10	7.902E-10
WSW	1.259E-08	7.073E-09	4.809E-09	2.916E-09	2.046E-09	1.554E-09	1.242E-09	1.028E-09	8.719E-10	7.538E-10	6.612E-10
W	1.346E-08	7.795E-09	5.439E-09	3.440E-09	2.483E-09	1.909E-09	1.515E-09	1.234E-09	1.033E-09	8.831E-10	7.681E-10
WNW	1.574E-08	9.469E-09	6.834E-09	4.612E-09	3.501E-09	2.748E-09	2.180E-09	1.783E-09	1.499E-09	1.287E-09	1.123E-09
NW	1.469E-08	8.797E-09	6.323E-09	4.229E-09	3.222E-09	2.609E-09	2.171E-09	1.824E-09	1.544E-09	1.329E-09	1.163E-09
NNW	1.486E-08	9.406E-09	7.046E-09	4.964E-09	3.853E-09	3.087E-09	2.488E-09	2.043E-09	1.720E-09	1.478E-09	1.292E-09
N	1.976E-08	1.253E-08	9.316E-09	6.421E-09	4.916E-09	3.960E-09	3.269E-09	2.728E-09	2.299E-09	1.971E-09	1.718E-09
NNE	3.518E-08	2.055E-08	1.438E-08	9.070E-09	6.523E-09	5.046E-09	4.091E-09	3.426E-09	2.939E-09	2.569E-09	2.278E-09
NE	3.427E-08	2.035E-08	1.435E-08	9.124E-09	6.598E-09	5.126E-09	4.171E-09	3.505E-09	3.017E-09	2.645E-09	2.353E-09
ENE	3.066E-08	1.916E-08	1.393E-08	9.188E-09	6.809E-09	5.391E-09	4.458E-09	3.800E-09	3.313E-09	2.939E-09	2.643E-09
E	2.389E-08	1.506E-08	1.100E-08	7.294E-09	5.406E-09	4.267E-09	3.509E-09	2.971E-09	2.569E-09	2.259E-09	2.013E-09
ESE	2.509E-08	1.618E-08	1.203E-08	8.195E-09	6.205E-09	4.990E-09	4.173E-09	3.588E-09	3.148E-09	2.807E-09	2.534E-09
SE	2.150E-08	1.362E-08	9.988E-09	6.669E-09	4.981E-09	3.965E-09	3.292E-09	2.814E-09	2.459E-09	2.185E-09	1.968E-09
SSE	1.926E-08	1.207E-08	8.868E-09	6.049E-09	4.672E-09	3.868E-09	3.341E-09	2.964E-09	2.672E-09	2.432E-09	2.223E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.959E-07	9.336E-08	4.238E-08	2.633E-08	1.859E-08	1.003E-08	4.717E-09	2.810E-09	2.016E-09	1.583E-09
SSW	2.255E-07	7.802E-08	3.728E-08	2.328E-08	1.636E-08	8.575E-09	3.781E-09	2.110E-09	1.438E-09	1.083E-09
SW	2.796E-07	9.848E-08	4.501E-08	2.686E-08	1.825E-08	9.015E-09	3.638E-09	1.900E-09	1.240E-09	9.030E-10
WSW	2.764E-07	8.848E-08	3.757E-08	2.178E-08	1.475E-08	7.293E-09	2.950E-09	1.560E-09	1.030E-09	7.545E-10
W	3.446E-07	1.031E-07	4.179E-08	2.391E-08	1.595E-08	8.007E-09	3.459E-09	1.904E-09	1.238E-09	8.848E-10
WNW	3.694E-07	1.111E-07	4.685E-08	2.739E-08	1.854E-08	9.692E-09	4.612E-09	2.722E-09	1.788E-09	1.289E-09
NW	3.518E-07	1.013E-07	4.262E-08	2.510E-08	1.717E-08	9.006E-09	4.247E-09	2.597E-09	1.817E-09	1.331E-09
NNW	3.409E-07	9.732E-08	4.100E-08	2.454E-08	1.715E-08	9.569E-09	4.933E-09	3.052E-09	2.047E-09	1.481E-09
N	3.960E-07	1.201E-07	5.286E-08	3.237E-08	2.280E-08	1.271E-08	6.396E-09	3.939E-09	2.719E-09	1.975E-09

NNE	8.117E-07	2.341E-07	9.624E-08	5.814E-08	4.095E-08	2.106E-08	9.119E-09	5.058E-09	3.431E-09	2.571E-09
NE	6.326E-07	2.066E-07	9.347E-08	5.720E-08	3.987E-08	2.078E-08	9.163E-09	5.136E-09	3.509E-09	2.647E-09
ENE	3.808E-07	1.399E-07	7.325E-08	4.822E-08	3.508E-08	1.939E-08	9.183E-09	5.396E-09	3.802E-09	2.940E-09
E	2.856E-07	1.036E-07	5.513E-08	3.687E-08	2.718E-08	1.522E-08	7.279E-09	4.268E-09	2.972E-09	2.260E-09
ESE	3.018E-07	1.057E-07	5.638E-08	3.815E-08	2.841E-08	1.632E-08	8.163E-09	4.987E-09	3.588E-09	2.807E-09
SE	2.668E-07	9.393E-08	4.978E-08	3.327E-08	2.448E-08	1.376E-08	6.656E-09	3.967E-09	2.815E-09	2.186E-09
SSE	3.049E-07	1.015E-07	4.903E-08	3.115E-08	2.221E-08	1.225E-08	6.064E-09	3.872E-09	2.961E-09	2.426E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.277E+01	9.279E+01	9.279E+01	9.279E+01	9.279E+01	8.974E+01	8.171E+01	7.219E+01	6.240E+01	5.254E+01
SSW	9.208E+01	9.170E+01	9.170E+01	9.170E+01	9.170E+01	8.933E+01	8.307E+01	7.565E+01	6.803E+01	6.034E+01
SW	8.975E+01	8.901E+01	8.901E+01	8.901E+01	8.901E+01	8.676E+01	8.086E+01	7.385E+01	6.666E+01	5.940E+01
WSW	8.724E+01	8.632E+01	8.632E+01	8.632E+01	8.471E+01	7.927E+01	6.858E+01	5.590E+01	4.288E+01	2.975E+01
W	8.016E+01	7.884E+01	7.884E+01	7.884E+01	7.884E+01	6.936E+01	4.436E+01	1.560E+01	1.445E+00	3.609E-01
WNW	8.341E+01	8.187E+01	8.187E+01	8.187E+01	8.187E+01	7.070E+01	4.125E+01	1.062E+01	5.853E-01	2.655E-01
NW	8.594E+01	8.459E+01	8.459E+01	8.459E+01	8.405E+01	7.594E+01	5.578E+01	3.185E+01	9.599E+00	9.254E-01
NNW	8.742E+01	8.647E+01	8.647E+01	8.647E+01	8.540E+01	7.419E+01	4.709E+01	1.628E+01	1.765E+00	6.678E-01
N	8.803E+01	8.728E+01	8.728E+01	8.728E+01	8.675E+01	7.793E+01	5.590E+01	2.977E+01	7.780E+00	1.271E+00
NNE	8.784E+01	8.785E+01	8.785E+01	8.569E+01	8.338E+01	8.179E+01	7.879E+01	7.523E+01	7.158E+01	6.790E+01
NE	9.028E+01	9.030E+01	9.030E+01	9.030E+01	9.030E+01	8.881E+01	8.490E+01	8.026E+01	7.550E+01	7.070E+01
ENE	9.573E+01	9.576E+01	9.576E+01	9.576E+01	9.576E+01	9.427E+01	9.034E+01	8.568E+01	8.089E+01	7.606E+01
E	9.858E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01
ESE	9.731E+01	9.735E+01	9.735E+01	9.735E+01	9.735E+01	9.688E+01	9.563E+01	9.414E+01	9.262E+01	9.108E+01
SE	9.714E+01	9.717E+01	9.717E+01	9.717E+01	9.717E+01	9.622E+01	9.372E+01	9.075E+01	8.770E+01	8.463E+01
SSE	9.472E+01	9.475E+01	9.475E+01	9.475E+01	9.475E+01	9.014E+01	7.800E+01	6.359E+01	4.880E+01	3.389E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.545E-06	5.309E-07	3.032E-07	1.720E-07	8.800E-08	5.749E-08	4.178E-08	3.230E-08	2.603E-08	2.162E-08	1.837E-08
SSW	1.094E-06	3.896E-07	2.322E-07	1.377E-07	7.475E-08	5.017E-08	3.687E-08	2.861E-08	2.305E-08	1.910E-08	1.618E-08
SW	1.310E-06	4.744E-07	2.878E-07	1.752E-07	9.508E-08	6.213E-08	4.442E-08	3.364E-08	2.655E-08	2.162E-08	1.804E-08
WSW	1.344E-06	4.854E-07	2.842E-07	1.653E-07	8.410E-08	5.287E-08	3.691E-08	2.753E-08	2.150E-08	1.737E-08	1.457E-08
W	1.871E-06	6.226E-07	3.522E-07	1.992E-07	9.672E-08	5.943E-08	4.098E-08	3.035E-08	2.361E-08	1.903E-08	1.577E-08
WNW	2.119E-06	6.816E-07	3.722E-07	2.103E-07	1.048E-07	6.575E-08	4.602E-08	3.448E-08	2.706E-08	2.198E-08	1.833E-08
NW	2.132E-06	6.693E-07	3.505E-07	1.930E-07	9.508E-08	5.964E-08	4.186E-08	3.147E-08	2.479E-08	2.021E-08	1.698E-08
NNW	2.026E-06	6.448E-07	3.425E-07	1.868E-07	9.070E-08	5.697E-08	4.026E-08	3.052E-08	2.424E-08	1.992E-08	1.695E-08
N	2.203E-06	7.256E-07	4.025E-07	2.252E-07	1.127E-07	7.242E-08	5.204E-08	3.993E-08	3.200E-08	2.647E-08	2.255E-08
NNE	4.431E-06	1.485E-06	8.340E-07	4.562E-07	2.171E-07	1.346E-07	9.444E-08	7.123E-08	5.751E-08	4.801E-08	4.050E-08
NE	3.071E-06	1.106E-06	6.542E-07	3.779E-07	1.961E-07	1.278E-07	9.219E-08	7.073E-08	5.658E-08	4.668E-08	3.943E-08
ENE	1.789E-06	6.578E-07	3.901E-07	2.340E-07	1.352E-07	9.538E-08	7.272E-08	5.801E-08	4.777E-08	4.031E-08	3.467E-08
E	1.353E-06	5.030E-07	2.903E-07	1.722E-07	1.001E-07	7.115E-08	5.470E-08	4.399E-08	3.649E-08	3.099E-08	2.681E-08
ESE	1.542E-06	5.451E-07	3.044E-07	1.771E-07	1.016E-07	7.237E-08	5.594E-08	4.526E-08	3.777E-08	3.225E-08	2.804E-08
SE	1.363E-06	4.806E-07	2.694E-07	1.571E-07	9.047E-08	6.427E-08	4.942E-08	3.973E-08	3.295E-08	2.797E-08	2.418E-08
SSE	1.573E-06	5.446E-07	3.109E-07	1.795E-07	9.687E-08	6.543E-08	4.849E-08	3.795E-08	3.082E-08	2.573E-08	2.195E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000

S	1.590E-08	9.699E-09	6.968E-09	4.543E-09	3.345E-09	2.637E-09	2.172E-09	1.844E-09	1.601E-09	1.412E-09	1.261E-09
SSW	1.395E-08	8.286E-09	5.811E-09	3.640E-09	2.592E-09	1.984E-09	1.592E-09	1.319E-09	1.120E-09	9.690E-10	8.504E-10
SW	1.536E-08	8.647E-09	5.851E-09	3.491E-09	2.405E-09	1.793E-09	1.408E-09	1.146E-09	9.574E-10	8.163E-10	7.072E-10
WSW	1.247E-08	6.973E-09	4.715E-09	2.827E-09	1.961E-09	1.472E-09	1.163E-09	9.512E-10	7.978E-10	6.819E-10	5.913E-10
W	1.336E-08	7.706E-09	5.354E-09	3.356E-09	2.401E-09	1.829E-09	1.438E-09	1.161E-09	9.636E-10	8.172E-10	7.049E-10
WNW	1.561E-08	9.352E-09	6.719E-09	4.491E-09	3.373E-09	2.620E-09	2.057E-09	1.666E-09	1.387E-09	1.180E-09	1.020E-09
NW	1.456E-08	8.683E-09	6.213E-09	4.116E-09	3.106E-09	2.491E-09	2.053E-09	1.708E-09	1.432E-09	1.221E-09	1.058E-09
NNW	1.472E-08	9.268E-09	6.905E-09	4.807E-09	3.687E-09	2.919E-09	2.324E-09	1.886E-09	1.571E-09	1.336E-09	1.155E-09
N	1.957E-08	1.233E-08	9.113E-09	6.198E-09	4.679E-09	3.715E-09	3.023E-09	2.487E-09	2.067E-09	1.751E-09	1.507E-09
NNE	3.488E-08	2.028E-08	1.412E-08	8.812E-09	6.271E-09	4.799E-09	3.849E-09	3.190E-09	2.708E-09	2.341E-09	2.055E-09
NE	3.396E-08	2.005E-08	1.406E-08	8.825E-09	6.301E-09	4.831E-09	3.880E-09	3.218E-09	2.734E-09	2.366E-09	2.077E-09
ENE	3.030E-08	1.880E-08	1.356E-08	8.807E-09	6.422E-09	5.003E-09	4.069E-09	3.413E-09	2.928E-09	2.556E-09	2.263E-09
E	2.356E-08	1.473E-08	1.066E-08	6.937E-09	5.044E-09	3.906E-09	3.152E-09	2.618E-09	2.223E-09	1.919E-09	1.679E-09
ESE	2.475E-08	1.583E-08	1.167E-08	7.803E-09	5.802E-09	4.581E-09	3.763E-09	3.178E-09	2.740E-09	2.401E-09	2.131E-09
SE	2.123E-08	1.335E-08	9.708E-09	6.375E-09	4.681E-09	3.664E-09	2.990E-09	2.514E-09	2.160E-09	1.888E-09	1.673E-09
SSE	1.905E-08	1.186E-08	8.656E-09	5.819E-09	4.428E-09	3.610E-09	3.070E-09	2.681E-09	2.379E-09	2.131E-09	1.917E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.955E-07	9.310E-08	4.218E-08	2.614E-08	1.842E-08	9.863E-09	4.549E-09	2.639E-09	1.845E-09	1.412E-09
SSW	2.252E-07	7.781E-08	3.711E-08	2.313E-08	1.622E-08	8.445E-09	3.657E-09	1.990E-09	1.321E-09	9.699E-10
SW	2.792E-07	9.825E-08	4.483E-08	2.670E-08	1.811E-08	8.895E-09	3.532E-09	1.802E-09	1.149E-09	8.177E-10
WSW	2.761E-07	8.826E-08	3.741E-08	2.165E-08	1.463E-08	7.192E-09	2.861E-09	1.479E-09	9.532E-10	6.827E-10
W	3.443E-07	1.029E-07	4.165E-08	2.379E-08	1.584E-08	7.917E-09	3.376E-09	1.825E-09	1.165E-09	8.190E-10
WNW	3.690E-07	1.109E-07	4.666E-08	2.724E-08	1.840E-08	9.573E-09	4.489E-09	2.595E-09	1.671E-09	1.182E-09
NW	3.514E-07	1.011E-07	4.245E-08	2.495E-08	1.704E-08	8.892E-09	4.133E-09	2.480E-09	1.701E-09	1.223E-09
NNW	3.405E-07	9.707E-08	4.082E-08	2.439E-08	1.700E-08	9.429E-09	4.776E-09	2.886E-09	1.891E-09	1.338E-09
N	3.955E-07	1.198E-07	5.263E-08	3.216E-08	2.261E-08	1.251E-08	6.171E-09	3.695E-09	2.480E-09	1.754E-09
NNE	8.107E-07	2.336E-07	9.587E-08	5.781E-08	4.064E-08	2.079E-08	8.863E-09	4.812E-09	3.194E-09	2.344E-09
NE	6.318E-07	2.061E-07	9.309E-08	5.685E-08	3.955E-08	2.048E-08	8.866E-09	4.842E-09	3.223E-09	2.368E-09
ENE	3.802E-07	1.395E-07	7.288E-08	4.785E-08	3.472E-08	1.903E-08	8.803E-09	5.008E-09	3.416E-09	2.558E-09
E	2.851E-07	1.033E-07	5.480E-08	3.654E-08	2.685E-08	1.488E-08	6.924E-09	3.908E-09	2.620E-09	1.920E-09
ESE	3.013E-07	1.054E-07	5.605E-08	3.781E-08	2.807E-08	1.596E-08	7.772E-09	4.579E-09	3.178E-09	2.401E-09
SE	2.664E-07	9.364E-08	4.950E-08	3.299E-08	2.421E-08	1.348E-08	6.363E-09	3.666E-09	2.515E-09	1.889E-09
SSE	3.044E-07	1.012E-07	4.879E-08	3.092E-08	2.200E-08	1.204E-08	5.831E-09	3.612E-09	2.677E-09	2.125E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.472E-06	4.916E-07	2.761E-07	1.560E-07	7.997E-08	5.230E-08	3.800E-08	2.935E-08	2.362E-08	1.958E-08	1.661E-08
SSW	1.043E-06	3.613E-07	2.123E-07	1.260E-07	6.880E-08	4.630E-08	3.402E-08	2.636E-08	2.120E-08	1.753E-08	1.481E-08
SW	1.252E-06	4.409E-07	2.642E-07	1.614E-07	8.803E-08	5.750E-08	4.099E-08	3.092E-08	2.430E-08	1.970E-08	1.637E-08
WSW	1.287E-06	4.527E-07	2.612E-07	1.518E-07	7.724E-08	4.842E-08	3.366E-08	2.499E-08	1.942E-08	1.562E-08	1.306E-08
W	1.787E-06	5.768E-07	3.207E-07	1.806E-07	8.731E-08	5.338E-08	3.661E-08	2.696E-08	2.085E-08	1.672E-08	1.379E-08
WNW	2.032E-06	6.353E-07	3.403E-07	1.916E-07	9.526E-08	5.956E-08	4.152E-08	3.096E-08	2.419E-08	1.956E-08	1.625E-08
NW	2.048E-06	6.256E-07	3.209E-07	1.757E-07	8.621E-08	5.387E-08	3.765E-08	2.817E-08	2.209E-08	1.793E-08	1.501E-08
NNW	1.940E-06	6.001E-07	3.121E-07	1.690E-07	8.165E-08	5.114E-08	3.604E-08	2.724E-08	2.157E-08	1.768E-08	1.503E-08
N	2.103E-06	6.721E-07	3.655E-07	2.033E-07	1.017E-07	6.538E-08	4.697E-08	3.600E-08	2.882E-08	2.380E-08	2.026E-08
NNE	4.219E-06	1.371E-06	7.548E-07	4.097E-07	1.939E-07	1.200E-07	8.397E-08	6.318E-08	5.100E-08	4.257E-08	3.585E-08
NE	2.926E-06	1.025E-06	5.975E-07	3.448E-07	1.796E-07	1.171E-07	8.444E-08	6.467E-08	5.163E-08	4.250E-08	3.582E-08
ENE	1.713E-06	6.153E-07	3.601E-07	2.163E-07	1.261E-07	8.936E-08	6.821E-08	5.440E-08	4.476E-08	3.773E-08	3.241E-08
E	1.302E-06	4.739E-07	2.695E-07	1.598E-07	9.365E-08	6.684E-08	5.145E-08	4.138E-08	3.432E-08	2.913E-08	2.518E-08
ESE	1.484E-06	5.130E-07	2.817E-07	1.636E-07	9.467E-08	6.775E-08	5.249E-08	4.251E-08	3.549E-08	3.030E-08	2.634E-08
SE	1.312E-06	4.521E-07	2.491E-07	1.451E-07	8.424E-08	6.014E-08	4.633E-08	3.727E-08	3.090E-08	2.622E-08	2.265E-08
SSE	1.505E-06	5.074E-07	2.850E-07	1.642E-07	8.912E-08	6.035E-08	4.474E-08	3.498E-08	2.837E-08	2.364E-08	2.013E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.435E-08	8.727E-09	6.258E-09	4.083E-09	3.018E-09	2.393E-09	1.986E-09	1.699E-09	1.480E-09	1.312E-09	1.172E-09
SSW	1.275E-08	7.520E-09	5.247E-09	3.270E-09	2.326E-09	1.782E-09	1.434E-09	1.192E-09	1.013E-09	8.779E-10	7.707E-10
SW	1.388E-08	7.695E-09	5.143E-09	3.016E-09	2.053E-09	1.519E-09	1.186E-09	9.608E-10	7.980E-10	6.774E-10	5.838E-10
WSW	1.114E-08	6.130E-09	4.094E-09	2.411E-09	1.652E-09	1.231E-09	9.636E-10	7.752E-10	6.371E-10	5.336E-10	4.538E-10
W	1.163E-08	6.622E-09	4.556E-09	2.820E-09	1.954E-09	1.433E-09	1.094E-09	8.612E-10	6.984E-10	5.798E-10	4.905E-10
WNW	1.378E-08	8.193E-09	5.857E-09	3.887E-09	2.809E-09	2.107E-09	1.611E-09	1.274E-09	1.038E-09	8.655E-10	7.351E-10
NW	1.283E-08	7.580E-09	5.388E-09	3.555E-09	2.660E-09	2.068E-09	1.650E-09	1.341E-09	1.101E-09	9.213E-10	7.845E-10
NNW	1.303E-08	8.216E-09	6.133E-09	4.293E-09	3.196E-09	2.436E-09	1.891E-09	1.500E-09	1.225E-09	1.023E-09	8.698E-10
N	1.757E-08	1.111E-08	8.229E-09	5.640E-09	4.258E-09	3.290E-09	2.599E-09	2.095E-09	1.713E-09	1.429E-09	1.213E-09
NNE	3.082E-08	1.779E-08	1.232E-08	7.633E-09	5.412E-09	4.136E-09	3.317E-09	2.750E-09	2.329E-09	2.012E-09	1.762E-09
NE	3.078E-08	1.806E-08	1.261E-08	7.886E-09	5.628E-09	4.324E-09	3.485E-09	2.902E-09	2.469E-09	2.142E-09	1.883E-09
ENE	2.830E-08	1.752E-08	1.263E-08	8.220E-09	6.025E-09	4.725E-09	3.875E-09	3.277E-09	2.827E-09	2.484E-09	2.209E-09
E	2.211E-08	1.380E-08	9.996E-09	6.528E-09	4.774E-09	3.724E-09	3.028E-09	2.537E-09	2.172E-09	1.893E-09	1.669E-09
ESE	2.325E-08	1.489E-08	1.099E-08	7.402E-09	5.548E-09	4.421E-09	3.667E-09	3.128E-09	2.724E-09	2.413E-09	2.161E-09
SE	1.988E-08	1.248E-08	9.084E-09	5.986E-09	4.421E-09	3.485E-09	2.868E-09	2.432E-09	2.107E-09	1.857E-09	1.656E-09
SSE	1.744E-08	1.083E-08	7.899E-09	5.334E-09	4.096E-09	3.379E-09	2.911E-09	2.567E-09	2.263E-09	2.005E-09	1.783E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.706E-07	8.458E-08	3.835E-08	2.372E-08	1.665E-08	8.879E-09	4.093E-09	2.397E-09	1.698E-09	1.310E-09
SSW	2.071E-07	7.150E-08	3.423E-08	2.127E-08	1.485E-08	7.671E-09	3.290E-09	1.788E-09	1.193E-09	8.782E-10
SW	2.578E-07	9.076E-08	4.136E-08	2.444E-08	1.643E-08	7.935E-09	3.060E-09	1.528E-09	9.632E-10	6.785E-10
WSW	2.552E-07	8.100E-08	3.413E-08	1.956E-08	1.311E-08	6.339E-09	2.448E-09	1.236E-09	7.764E-10	5.347E-10
W	3.153E-07	9.295E-08	3.722E-08	2.102E-08	1.386E-08	6.816E-09	2.821E-09	1.436E-09	8.657E-10	5.819E-10
WNW	3.398E-07	1.008E-07	4.211E-08	2.436E-08	1.632E-08	8.397E-09	3.845E-09	2.096E-09	1.280E-09	8.683E-10
NW	3.241E-07	9.172E-08	3.819E-08	2.224E-08	1.507E-08	7.773E-09	3.564E-09	2.059E-09	1.338E-09	9.239E-10
NNW	3.125E-07	8.749E-08	3.654E-08	2.171E-08	1.507E-08	8.360E-09	4.214E-09	2.420E-09	1.507E-09	1.026E-09
N	3.615E-07	1.081E-07	4.749E-08	2.896E-08	2.031E-08	1.126E-08	5.601E-09	3.272E-09	2.094E-09	1.433E-09
NNE	7.383E-07	2.090E-07	8.525E-08	5.127E-08	3.598E-08	1.826E-08	7.688E-09	4.149E-09	2.752E-09	2.013E-09
NE	5.802E-07	1.885E-07	8.525E-08	5.187E-08	3.593E-08	1.847E-08	7.932E-09	4.336E-09	2.903E-09	2.143E-09
ENE	3.529E-07	1.298E-07	6.832E-08	4.484E-08	3.246E-08	1.774E-08	8.224E-09	4.732E-09	3.276E-09	2.484E-09
E	2.662E-07	9.644E-08	5.153E-08	3.436E-08	2.521E-08	1.396E-08	6.519E-09	3.726E-09	2.538E-09	1.893E-09
ESE	2.806E-07	9.803E-08	5.257E-08	3.552E-08	2.637E-08	1.501E-08	7.376E-09	4.420E-09	3.128E-09	2.412E-09
SE	2.480E-07	8.705E-08	4.639E-08	3.094E-08	2.268E-08	1.261E-08	5.979E-09	3.488E-09	2.432E-09	1.857E-09
SSE	2.808E-07	9.303E-08	4.500E-08	2.845E-08	2.017E-08	1.100E-08	5.354E-09	3.383E-09	2.549E-09	1.999E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.620E-08	7.721E-09	4.871E-09	2.695E-09	1.093E-09	6.056E-10	3.858E-10	2.675E-10	1.961E-10	1.497E-10	1.178E-10
SSW	1.293E-08	6.324E-09	4.059E-09	2.283E-09	9.445E-10	5.276E-10	3.377E-10	2.347E-10	1.724E-10	1.317E-10	1.037E-10
SW	1.703E-08	8.355E-09	5.609E-09	3.182E-09	1.330E-09	7.452E-10	4.776E-10	3.323E-10	2.441E-10	1.865E-10	1.469E-10
WSW	2.118E-08	1.044E-08	6.743E-09	3.637E-09	1.440E-09	7.781E-10	4.871E-10	3.340E-10	2.433E-10	1.850E-10	1.492E-10
W	2.841E-08	1.375E-08	8.193E-09	4.449E-09	1.729E-09	9.096E-10	5.584E-10	3.776E-10	2.725E-10	2.060E-10	1.613E-10
WNW	2.798E-08	1.456E-08	9.279E-09	4.834E-09	1.840E-09	9.692E-10	5.966E-10	4.047E-10	2.929E-10	2.221E-10	1.744E-10
NW	2.538E-08	1.358E-08	8.458E-09	4.507E-09	1.683E-09	8.845E-10	5.442E-10	3.694E-10	2.677E-10	2.034E-10	1.600E-10
NNW	2.185E-08	1.116E-08	6.912E-09	3.600E-09	1.338E-09	7.033E-10	4.329E-10	2.939E-10	2.131E-10	1.618E-10	1.285E-10
N	2.224E-08	1.059E-08	6.558E-09	3.476E-09	1.338E-09	7.161E-10	4.460E-10	3.048E-10	2.217E-10	1.685E-10	1.324E-10
NNE	4.915E-08	2.200E-08	1.321E-08	6.971E-09	2.692E-09	1.443E-09	8.994E-10	6.150E-10	4.506E-10	3.457E-10	2.710E-10
NE	4.259E-08	1.989E-08	1.252E-08	6.954E-09	2.844E-09	1.581E-09	1.009E-09	7.004E-10	5.138E-10	3.922E-10	3.086E-10
ENE	2.485E-08	1.321E-08	8.686E-09	4.908E-09	2.013E-09	1.128E-09	7.235E-10	5.041E-10	3.710E-10	2.839E-10	2.239E-10
E	2.078E-08	1.151E-08	7.539E-09	4.193E-09	1.679E-09	9.289E-10	5.916E-10	4.104E-10	3.014E-10	2.305E-10	1.818E-10
ESE	2.236E-08	1.234E-08	8.008E-09	4.400E-09	1.736E-09	9.519E-10	6.029E-10	4.169E-10	3.056E-10	2.335E-10	1.841E-10
SE	1.916E-08	1.066E-08	6.933E-09	3.811E-09	1.503E-09	8.242E-10	5.220E-10	3.610E-10	2.646E-10	2.023E-10	1.595E-10
SSE	1.885E-08	9.811E-09	6.324E-09	3.502E-09	1.405E-09	7.766E-10	4.941E-10	3.425E-10	2.513E-10	1.920E-10	1.514E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.500E-11	4.507E-11	2.780E-11	1.473E-11	9.333E-12	6.696E-12	5.152E-12	4.147E-12	3.668E-12	3.464E-12	4.275E-12
SSW	8.359E-11	3.980E-11	2.450E-11	1.285E-11	8.132E-12	5.811E-12	4.454E-12	3.577E-12	2.971E-12	2.532E-12	2.253E-12
SW	1.184E-10	5.665E-11	3.449E-11	1.812E-11	1.143E-11	8.108E-12	6.150E-12	4.878E-12	4.004E-12	3.374E-12	2.962E-12
WSW	1.202E-10	5.695E-11	3.437E-11	1.797E-11	1.145E-11	8.216E-12	7.703E-12	7.239E-12	5.967E-12	4.837E-12	3.912E-12
W	1.298E-10	6.089E-11	3.703E-11	2.442E-11	2.023E-11	1.393E-11	9.853E-12	7.414E-12	5.776E-12	4.615E-12	3.767E-12
WNW	1.408E-10	6.781E-11	4.113E-11	3.496E-11	2.496E-11	1.633E-11	1.174E-11	8.842E-12	6.876E-12	5.496E-12	4.486E-12

NW	1.293E-10	6.214E-11	3.850E-11	2.079E-11	2.332E-11	1.746E-11	1.243E-11	8.600E-12	6.674E-12	5.332E-12	4.352E-12
NNW	1.038E-10	4.957E-11	3.063E-11	2.273E-11	2.375E-11	1.480E-11	1.030E-11	7.784E-12	6.055E-12	4.838E-12	3.949E-12
N	1.068E-10	5.145E-11	3.169E-11	1.707E-11	2.634E-11	2.013E-11	1.312E-11	9.402E-12	7.316E-12	5.865E-12	4.788E-12
NNE	2.182E-10	1.032E-10	6.289E-11	3.299E-11	2.104E-11	1.514E-11	1.169E-11	9.466E-12	7.909E-12	6.770E-12	5.927E-12
NE	2.487E-10	1.180E-10	7.238E-11	3.818E-11	2.416E-11	1.719E-11	1.312E-11	1.050E-11	8.656E-12	7.348E-12	6.352E-12
ENE	1.808E-10	8.606E-11	5.307E-11	2.822E-11	1.798E-11	1.299E-11	1.001E-11	8.133E-12	6.768E-12	5.825E-12	5.084E-12
E	1.470E-10	7.005E-11	4.333E-11	2.318E-11	1.478E-11	1.086E-11	8.348E-12	6.628E-12	5.389E-12	4.466E-12	3.757E-12
ESE	1.489E-10	7.098E-11	4.397E-11	2.356E-11	1.504E-11	1.108E-11	8.545E-12	6.801E-12	5.546E-12	4.597E-12	3.946E-12
SE	1.290E-10	6.155E-11	3.811E-11	2.044E-11	1.307E-11	9.619E-12	7.444E-12	5.959E-12	5.021E-12	4.248E-12	3.820E-12
SSE	1.222E-10	5.832E-11	3.606E-11	1.921E-11	1.236E-11	8.868E-12	7.497E-12	8.704E-12	9.337E-12	7.687E-12	6.255E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

Fermi COL A (with Staff JFD)

Turbine Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.537E-09	1.232E-09	3.971E-10	1.988E-10	1.188E-10	4.849E-11	1.524E-11	6.781E-12	4.252E-12	3.825E-12
SSW	3.773E-09	1.057E-09	3.472E-10	1.747E-10	1.045E-10	4.273E-11	1.334E-11	5.887E-12	3.597E-12	2.559E-12
SW	5.141E-09	1.482E-09	4.908E-10	2.474E-10	1.481E-10	6.052E-11	1.879E-11	8.210E-12	4.909E-12	3.408E-12
WSW	6.185E-09	1.634E-09	5.035E-10	2.470E-10	1.491E-10	6.098E-11	1.872E-11	8.873E-12	6.887E-12	4.829E-12
W	7.764E-09	1.969E-09	5.797E-10	2.772E-10	1.628E-10	6.559E-11	2.536E-11	1.398E-11	7.487E-12	4.645E-12
WNW	8.477E-09	2.118E-09	6.192E-10	2.979E-10	1.761E-10	7.217E-11	3.188E-11	1.679E-11	8.923E-12	5.531E-12
NW	7.840E-09	1.956E-09	5.650E-10	2.723E-10	1.615E-10	6.657E-11	2.585E-11	1.701E-11	8.961E-12	5.367E-12
NNW	6.385E-09	1.559E-09	4.494E-10	2.166E-10	1.292E-10	5.320E-11	2.494E-11	1.539E-11	7.845E-12	4.869E-12
N	6.085E-09	1.537E-09	4.615E-10	2.252E-10	1.336E-10	5.496E-11	2.444E-11	1.898E-11	9.669E-12	5.896E-12
NNE	1.239E-08	3.088E-09	9.305E-10	4.576E-10	2.736E-10	1.108E-10	3.433E-11	1.533E-11	9.509E-12	6.795E-12
NE	1.168E-08	3.196E-09	1.038E-09	5.208E-10	3.112E-10	1.268E-10	3.955E-11	1.742E-11	1.054E-11	7.366E-12
ENE	8.013E-09	2.263E-09	7.435E-10	3.758E-10	2.257E-10	9.245E-11	2.919E-11	1.313E-11	8.150E-12	5.830E-12
E	6.933E-09	1.904E-09	6.091E-10	3.056E-10	1.834E-10	7.527E-11	2.392E-11	1.090E-11	6.647E-12	4.477E-12
ESE	7.366E-09	1.979E-09	6.216E-10	3.099E-10	1.857E-10	7.629E-11	2.431E-11	1.112E-11	6.821E-12	4.637E-12
SE	6.374E-09	1.714E-09	5.382E-10	2.684E-10	1.609E-10	6.612E-11	2.109E-11	9.669E-12	6.026E-12	4.319E-12
SSE	5.844E-09	1.592E-09	5.088E-10	2.548E-10	1.526E-10	6.263E-11	1.991E-11	9.251E-12	8.600E-12	7.646E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.332	LESS THAN	2.176
MIXED	BETWEEN	1.332 AND 6.659	BETWEEN	2.176 AND 10.881
GROUND LEVEL	ABOVE	6.659	ABOVE	10.881

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 10:31

0Fermi COL A (with Staff JFD)

0Turbine Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3)	X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
		NO DECAY					

			+ 2.260 DAY DECAY		+ 8.000 DAY DECAY	
			UNDEPLETED	UNDEPLETED	DEPLETED	
Site Boundary	S	.70	3.3E-07	3.3E-07	3.0E-07	5.2E-09
Site Boundary	SSW	.72	2.4E-07	2.4E-07	2.2E-07	4.3E-09
Site Boundary	SW	.90	2.1E-07	2.1E-07	1.9E-07	4.0E-09
Site Boundary	WSW	.80	2.5E-07	2.5E-07	2.3E-07	6.0E-09
Site Boundary	W	.59	4.8E-07	4.8E-07	4.4E-07	1.1E-08
Site Boundary	WNW	.57	5.4E-07	5.4E-07	5.0E-07	1.3E-08
Site Boundary	NW	.57	5.2E-07	5.2E-07	4.8E-07	1.2E-08
Site Boundary	NNW	.57	5.1E-07	5.1E-07	4.7E-07	9.6E-09
Site Boundary	N	.66	4.7E-07	4.7E-07	4.3E-07	7.6E-09
Site Boundary	NNE	.95	5.0E-07	5.0E-07	4.5E-07	7.8E-09
Site Boundary	NE	1.28	2.5E-07	2.5E-07	2.3E-07	4.1E-09
Site Boundary	SSE	.70	3.3E-07	3.3E-07	3.1E-07	6.8E-09
Residence	SSE	.92	2.1E-07	2.1E-07	1.9E-07	4.2E-09
Residence	SSW	.90	1.7E-07	1.7E-07	1.5E-07	2.9E-09
Residence	SW	1.00	1.8E-07	1.7E-07	1.6E-07	3.2E-09
Residence	WSW	1.13	1.3E-07	1.3E-07	1.2E-07	2.7E-09
Residence	W	.98	2.1E-07	2.1E-07	1.9E-07	4.7E-09
Residence	NW	.69	3.9E-07	3.9E-07	3.6E-07	9.4E-09
Residence	NW	1.07	1.7E-07	1.7E-07	1.5E-07	3.9E-09
Residence	NNW	1.19	1.3E-07	1.3E-07	1.2E-07	2.4E-09
Residence	NNE	1.32	2.7E-07	2.7E-07	2.4E-07	3.6E-09
Residence	NNE	1.31	2.7E-07	2.7E-07	2.5E-07	3.7E-09
Residence	NE	1.36	2.3E-07	2.3E-07	2.1E-07	3.6E-09
Garden	S	1.28	1.1E-07	1.1E-07	1.0E-07	1.5E-09
Garden	WSW	2.14	4.7E-08	4.7E-08	4.3E-08	6.7E-10
Garden	W	1.50	9.6E-08	9.6E-08	8.6E-08	1.7E-09
Garden	NW	.69	3.9E-07	3.9E-07	3.6E-07	9.4E-09
Garden	NNW	1.09	1.6E-07	1.6E-07	1.4E-07	2.9E-09
Garden	NNW	1.46	9.4E-08	9.4E-08	8.5E-08	1.4E-09
Garden	N	2.31	5.9E-08	5.8E-08	5.3E-08	5.3E-10
Garden	NNE	2.16	1.2E-07	1.2E-07	1.1E-07	1.2E-09
Garden	NE	2.24	1.1E-07	1.1E-07	9.9E-08	1.3E-09
Sheep	NNW	4.46	1.7E-08	1.7E-08	1.5E-08	1.3E-10
Sheep	NNE	4.50	4.1E-08	4.1E-08	3.6E-08	2.7E-10
Goat	WNW	2.30	5.3E-08	5.2E-08	4.7E-08	7.1E-10
Goat	NNW	3.08	2.9E-08	2.9E-08	2.6E-08	2.8E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.332	LESS THAN	2.176
MIXED	BETWEEN	1.332 AND 6.659	BETWEEN	2.176 AND 10.881
GROUND LEVEL	ABOVE	6.659	ABOVE	10.881

NRC FORM 383
(5-1998)

U.S. NUCLEAR REGULATORY COMMISSION

CALCULATION WORKSHEET

SHEET ____ OF ____

PROJECT		CALCULATED BY	DATE
DOCKET NUMBER	SUBJECT	CHECKED BY	DATE

```
10101111000
Fermi COL B (with Staff JFD)
   11    7    6   15    2    3    0
  10. 101. 2.26  -8.   0.
   66    4    6   68  127  128   65
    3    0    5   15    2    2    1    4    3    3    4    6   18   14    9    4
   21   19   16   19    7   15   12   14   16   14   20   37   34   52   40   17
   30   32   39   30   41   49   61   49   55   61   52   68   98  102   89   47
   86   79  132  131  136  357  493  307  275  250  174  198  252  295  267  194
   96   58  150  170  174  330  412  323  189  337  184  223  182  245  222  159
   54   44   52  111  153  168   75   69   49  185  142  120   93   93   87   97
   20    9   12   40  107   63    9   13    7   66  100   32   36   39   33   39
   21   12    5   27   67   21    1    2    2   28   42    8   12   17   12   17
    0    0    0    0    4    0    0    0    0    6    5    0    0    0    0    0
    0    0    0    0    2    0    0    0    0    0    0    0    0    0    0    0
    3    1    1    1    0    0    0    2    2    3    1    2    3    5    1    1
    6    2    2    1    1    3    4    4    2    6    3   17   14   12   15    7
    8    8    6    4    2    4   18    5   12    9    6   16   22   18   19   18
   27   17   20   16   19   37   42   36   24   43   48   63   42   50   51   39
   18   24   20   22   18   23   26   36   23   57   83   78   43   28   26   26
   15   11   15   21   21   16    5    7    8   40   55   27   19   14   10   21
    9    5    5   10   18    5    2    1    1   21   45   10    6    7    5    4
    4    2    1   10   10    3    1    0    0   11   29    3    2    9    3    2
    0    0    0    0    0    0    0    0    0    1    4    0    0    0    0    0
    0    0    0    0    0    0    0    0    0    0    1    0    0    0    0    0
    3    2    3    2    0    0    0    1    2    4    4    0    8    7    4    3
    3    8    3    6    2    2    3    7    4    6    8   10   13   16   13    5
    9   16   11    7    5   13   10    7    7   20   24   31   21   17   20   15
   38   32   26   18   17   31   28   40   38   38   60   74   55   45   40   54
   21   17   37   38   20   24   24   17   14   60   80   69   39   34   27   36
   22   11   12   38   16   15    9    6    7   39   57   33   28   20   14   14
   12   20    9   22   11   15    3    3    5   25   40   12   26   12    4    9
    3    8    7   16   16    6    2    0    0   19   50    7    4    5    3    4
    0    1    0    3    1    0    0    0    0    0    8    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    1    0    0    0    0    0
   20   18   18    4    4    5    9    6   14   25   27   49   60   58   39   32
   63   57   30   16   16   23   17   22   38   32   69  119  103  116   95   73
   79  112   64   30   27   51   40   49   59   60  146  253  186  132  166  119
  156  192  310  152  129  192  192  130  181  247  475  510  341  324  295  331
  166  122  371  254  205  194  177  111  177  320  502  360  241  189  175  224
  167  106  223  222  157  139   75   66  104  333  442  159  114  113   85   88
   82  100   95  100  126   52   14   19   34  173  315   53   50   79   24   51
   56   40   17   83  100   43   12    5   10  120  197   39   14   25    8   20
    5   16    2    5   25    1    4    2    0    3   39    4    1    0    0    0
    0    0    0    0    1    0    0    0    0    0    1    0    0    0    0    0
   50   31   22   17   14   15   15   21   48   53   83  142  138  154  109   58
   86   87   44   25   20   42   32   44   81   98  208  326  221  264  220  121
  100  159   43   41   52   68   55   79  136  159  290  284  166  184  234  180
  186  181  243  156  156  214  216  219  301  579  375  229  162  151  162  234
   99   67  144  133  131  191  151  143  215  486  179   57   55   72   55   63
   35   19   31   59   68   54   59   72  106  277   89   21   16   21   19   20
   16    3    9   17   61   37   13   20   36  107   57    3    5    6    6    9
    7    2    0    6   43   19    5    0   15   67   30    2    2    4    3    7
    0    0    0    4   12    2    0    2    1    2    4    0    1    1    0    0
    0    0    0    0    2    0    0    0    0    0    0    0    0    1    0    0
   40   27   13    8    8   11   12   35   60   70  105  150  191  195  127   62
   69   36   16    9   10   11   12   35   75  107  163  211  117  208  144   99
   99   48    8    6   11   34   37   41   57   93  105   53   39   71   52   73
  106   39   12   12   35   59   71  105   86  170   35    9    8   17   14   49
   12   10    5   14   28   35   38   69   62  113   18    5    6    2    6    4
    7    2    0    7   10   12   22   22   38   72    5    2    1    4    2    6
    2    0    0    1    7    2    9    9   21   17    1    2    0    1    0    0
    0    0    0    0   10    3    2    5    5   10    1    6    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    1    0    0    0
    0    0    0    0    0    0    0    0    0    0    0    0    1    0    0    0
   19   10    4    2    1    9    6    7   14   21   42  102  200  267  123   63
   44   15    6    3    3   12   17   10    9   42   36   83   70  219   99   69
   30    3    0    3    8   20   28   15   11   29   20   23    6   26   10   37
   24   10    2    3   10   31   49   39   21   29   11    2    2    3    3   21
    2    0    0    1   14   19   20   26    8   18    5    1    0    1    0    0
    1    0    0    0    6    9   14   11    5   11    7    4    0    0    0    0
    0    0    0    0    1    1    5    5    0    2    1    1    0    0    0    0
    0    0    0    0    0    1    1    2    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  -1. 0.34  1.0  1.5  2.0  3.0  4.0  5.0  6.0  8.0 10.0 20.0
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
```

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 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
80467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
    2    2
Meat  Cow
    8 4904   10 7239
Milk Cow
    6 3513    7 5869
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

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1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    11:11

 PRINTOUT OF INPUT CARDS
0    1     10101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL B (with Staff JFD)
     3        11    7    6   15    2    3    0
     4      10.00 101.00   2.26  -8.00    .00
     5      66.000  4.000  6.000 68.000127.000128.000 65.000
     6       3.000   .000  5.000 15.000  2.000  2.000  1.000  4.000  3.000  3.000  4.000  6.000 18.000 14.000  9.000  4.000
     6      21.000 19.000 16.000 19.000  7.000 15.000 12.000 14.000 16.000 14.000 20.000 37.000 34.000 52.000 40.000 17.000
     6      30.000 32.000 39.000 30.000 41.000 49.000 61.000 49.000 55.000 61.000 52.000 68.000 98.000102.000 89.000 47.000
     6      86.000 79.000132.000131.000136.000357.000493.000307.000275.000250.000174.000198.000252.000295.000267.000194.000
     6      96.000 58.000150.000170.000174.000330.000412.000323.000189.000337.000184.000223.000182.000245.000222.000159.000
     6      54.000 44.000 52.000111.000153.000168.000 75.000 69.000 49.000185.000142.000120.000 93.000 93.000 87.000 97.000
     6      20.000  9.000 12.000 40.000107.000 63.000  9.000 13.000  7.000 66.000100.000 32.000 36.000 39.000 33.000 39.000
     6      21.000 12.000  5.000 27.000 67.000 21.000  1.000  2.000  2.000 28.000 42.000  8.000 12.000 17.000 12.000 17.000
     6        .000   .000   .000   .000  4.000   .000   .000   .000   .000  6.000  5.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6       3.000  1.000  1.000  1.000   .000   .000   .000  2.000  2.000  3.000  1.000  2.000  3.000  5.000  1.000  1.000
     6       6.000  2.000  2.000  1.000  1.000  3.000  4.000  4.000  2.000  6.000  3.000 17.000 14.000 12.000 15.000  7.000
     6       8.000  8.000  6.000  4.000  2.000  4.000 18.000  5.000 12.000  9.000  6.000 16.000 22.000 18.000 19.000 18.000
     6      27.000 17.000 20.000 16.000 19.000 37.000 42.000 36.000 24.000 43.000 48.000 63.000 42.000 50.000 51.000 39.000
     6      18.000 24.000 20.000 22.000 18.000 23.000 26.000 36.000 23.000 57.000 83.000 78.000 43.000 28.000 26.000 26.000
     6      15.000 11.000 15.000 21.000 21.000 16.000  5.000  7.000  8.000 40.000 55.000 27.000 19.000 14.000 10.000 21.000
     6       9.000  5.000  5.000 10.000 18.000  5.000  2.000  1.000  1.000 21.000 45.000 10.000  6.000  7.000  5.000  4.000
     6       4.000  2.000  1.000 10.000 10.000  3.000  1.000   .000   .000 11.000 29.000  3.000  2.000  9.000  3.000  2.000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6       3.000  2.000  3.000  2.000   .000   .000   .000  1.000  2.000  4.000  4.000   .000  8.000  7.000  4.000  3.000
     6       3.000  8.000  3.000  6.000  2.000  2.000  3.000  7.000  4.000  6.000  8.000 10.000 13.000 16.000 13.000  5.000
     6       9.000 16.000 11.000  7.000  5.000 13.000 10.000  7.000  7.000 20.000 24.000 31.000 21.000 17.000 20.000 15.000
     6      38.000 32.000 26.000 18.000 17.000 31.000 28.000 40.000 38.000 38.000 60.000 74.000 55.000 45.000 40.000 54.000
     6      21.000 17.000 37.000 38.000 20.000 24.000 24.000 17.000 14.000 60.000 80.000 69.000 39.000 34.000 27.000 36.000
     6      22.000 11.000 12.000 38.000 16.000 15.000  9.000  6.000  7.000 39.000 57.000 33.000 28.000 20.000 14.000 14.000
     6      12.000 20.000  9.000 22.000 11.000 15.000  3.000  3.000  5.000 25.000 40.000 12.000 26.000 12.000  4.000  9.000
     6       3.000  8.000  7.000 16.000 16.000  6.000  2.000   .000   .000 19.000 50.000  7.000  4.000  5.000  3.000  4.000
     6        .000  1.000   .000  3.000  1.000   .000   .000   .000   .000   .000  8.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6      20.000 18.000 18.000  4.000  4.000  5.000  9.000  6.000 14.000 25.000 27.000 49.000 60.000 58.000 39.000 32.000
     6      63.000 57.000 30.000 16.000 16.000 23.000 17.000 22.000 38.000 32.000 69.000119.000103.000116.000 95.000 73.000
     6      79.000112.000 64.000 30.000 27.000 51.000 40.000 49.000 59.000 60.000146.000253.000186.000132.000166.000119.000
     6     156.000192.000310.000152.000129.000192.000192.000130.000181.000247.000475.000510.000341.000324.000295.000331.000
     6     166.000122.000371.000254.000205.000194.000177.000111.000177.000320.000502.000360.000241.000189.000175.000224.000
     6     167.000106.000223.000222.000157.000139.000 75.000 66.000104.000333.000442.000159.000114.000113.000 85.000 88.000
     6      82.000100.000 95.000100.000126.000 52.000 14.000 19.000 34.000173.000315.000 53.000 50.000 79.000 24.000 51.000
     6      56.000 40.000 17.000 83.000100.000 43.000 12.000  5.000 10.000120.000197.000 39.000 14.000 25.000  8.000 20.000
     6       5.000 16.000  2.000  5.000 25.000  1.000  4.000  2.000   .000  3.000 39.000  4.000  1.000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000
     6      50.000 31.000 22.000 17.000 14.000 15.000 15.000 21.000 48.000 53.000 83.000142.000138.000154.000109.000 58.000
     6      86.000 87.000 44.000 25.000 20.000 42.000 32.000 44.000 81.000 98.000208.000326.000221.000264.000220.000121.000
     6     100.000159.000 43.000 41.000 52.000 68.000 55.000 79.000136.000159.000290.000284.000166.000184.000234.000180.000
     6     186.000181.000243.000156.000156.000214.000216.000219.000301.000579.000375.000229.000162.000151.000162.000234.000
     6      99.000 67.000144.000133.000131.000191.000151.000143.000215.000486.000179.000 57.000 55.000 72.000 55.000 63.000
     6      35.000 19.000 31.000 59.000 68.000 54.000 59.000 72.000106.000277.000 89.000 21.000 16.000 21.000 19.000 20.000
     6      16.000  3.000  9.000 17.000 61.000 37.000 13.000 20.000 36.000107.000 57.000  3.000  5.000  6.000  6.000  9.000
     6       7.000  2.000   .000  6.000 43.000 19.000  5.000   .000 15.000 67.000 30.000  2.000  2.000  4.000  3.000  7.000
     6        .000   .000   .000  4.000 12.000  2.000   .000  2.000  1.000  2.000  4.000   .000  1.000  1.000   .000   .000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000
     6      40.000 27.000 13.000  8.000  8.000 11.000 12.000 35.000 60.000 70.000105.000150.000191.000195.000127.000 62.000
     6      69.000 36.000 16.000  9.000 10.000 11.000 12.000 35.000 75.000107.000163.000211.000117.000208.000144.000 99.000
     6      99.000 48.000  8.000  6.000 11.000 34.000 37.000 41.000 57.000 93.000105.000 53.000 39.000 71.000 52.000 73.000
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    6     106.000 39.000 12.000 12.000 35.000 59.000 71.000105.000 86.000170.000 35.000  9.000  8.000 17.000 14.000 49.000
    6      12.000 10.000  5.000 14.000 28.000 35.000 38.000 69.000 62.000113.000 18.000  5.000  6.000  2.000  6.000  4.000
    6       7.000  2.000   .000  7.000 10.000 12.000 22.000 22.000 38.000 72.000  5.000  2.000  1.000  4.000  2.000  6.000
    6       2.000   .000   .000  1.000  7.000  2.000  9.000  9.000 21.000 17.000  1.000  2.000   .000  1.000   .000   .000
    6        .000   .000   .000   .000 10.000  3.000  2.000  5.000  5.000 10.000  1.000  6.000  1.000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  1.000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000   .000
    6      19.000 10.000  4.000  2.000  1.000  9.000  6.000  7.000 14.000 21.000 42.000102.000200.000267.000123.000 63.000
    6      44.000 15.000  6.000  3.000  3.000 12.000 17.000 10.000  9.000 42.000 36.000 83.000 70.000219.000 99.000 69.000
    6      30.000  3.000   .000  3.000  8.000 20.000 28.000 15.000 11.000 29.000 20.000 23.000  6.000 26.000 10.000 37.000
    6      24.000 10.000  2.000  3.000 10.000 31.000 49.000 39.000 21.000 29.000 11.000  2.000  2.000  3.000  3.000 21.000
    6       2.000   .000   .000  1.000 14.000 19.000 20.000 26.000  8.000 18.000  5.000  1.000   .000  1.000   .000   .000
    6       1.000   .000   .000   .000  6.000  9.000 14.000 11.000  5.000 11.000  7.000  4.000   .000   .000   .000   .000
    6        .000   .000   .000   .000  1.000  1.000  5.000  5.000   .000  2.000  1.000  1.000   .000   .000   .000   .000
    6        .000   .000   .000   .000   .000  1.000  1.000  2.000   .000   .000   .000   .000   .000   .000   .000   .000
    6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    7         -1.   .340  1.000  1.500  2.000  3.000  4.000  5.000  6.000  8.000 10.000 20.000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
   10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
   10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
   11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
   10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
   11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
   10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
   11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
   12          2    2
   13     Meat  Cow
   14       8 4904.0 10 7239.0
   13     Milk Cow
   14       6 3513.0  7 5869.0
   15     Ground Level/Radwaste Bldg
   16        .000   .000   10.0     .0  350.0   10.0   .00
   17          0    0    0
   15     Reactor Bldg/Fuel Bldg Stack
   16      17.780  2.400   52.6   48.0     .0   52.6   .00
   17          0    0    0
   15     Turbine Bldg Stack
   16      17.780  1.950   71.3   52.0     .0   71.3   .00
   17          0    0    0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    11:11

     Fermi COL B (with Staff JFD)

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)       N    NNE     NE    ENE      E    ESE     SE    SSE      S    SSW     SW    WSW      W    WNW     NW    NNW  TOTAL
   .34         .004   .000   .007   .021   .003   .003   .001   .006   .004   .004   .006   .008   .025   .019   .012   .006   .129
  1.00         .006   .000   .010   .029   .004   .004   .002   .008   .006   .006   .008   .012   .035   .027   .018   .008   .181
  1.50         .041   .037   .031   .037   .014   .029   .023   .027   .031   .027   .039   .072   .066   .101   .078   .033   .688
  2.00         .058   .062   .076   .058   .080   .095   .119   .095   .107   .119   .101   .133   .191   .199   .173   .092  1.760
  3.00         .168   .154   .257   .255   .265   .696   .961   .598   .536   .487   .339   .386   .491   .575   .520   .378  7.067
  4.00         .187   .113   .292   .331   .339   .643   .803   .629   .368   .657   .359   .435   .355   .477   .433   .310  6.731
  5.00         .105   .086   .101   .216   .298   .327   .146   .134   .095   .361   .277   .234   .181   .181   .170   .189  3.103
  6.00         .039   .018   .023   .078   .209   .123   .018   .025   .014   .129   .195   .062   .070   .076   .064   .076  1.218
  8.00         .041   .023   .010   .053   .131   .041   .002   .004   .004   .055   .082   .016   .023   .033   .023   .033   .573
 10.00         .000   .000   .000   .000   .008   .000   .000   .000   .000   .012   .010   .000   .000   .000   .000   .000   .029
```

20.00	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004
TOTAL	.65	.49	.81	1.08	1.35	1.96	2.07	1.53	1.17	1.86	1.41	1.36	1.44	1.69	1.49	1.12	21.48

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.001	.000	.000	.000	.000	.000	.000	.001	.001	.001	.000	.001	.001	.001	.000	.000	.008
1.00	.006	.002	.002	.002	.000	.000	.000	.004	.004	.006	.002	.004	.006	.010	.002	.002	.051
1.50	.012	.004	.004	.002	.002	.006	.008	.008	.004	.012	.006	.033	.027	.023	.029	.014	.193
2.00	.016	.016	.012	.008	.004	.008	.035	.010	.023	.018	.012	.031	.043	.035	.037	.035	.341
3.00	.053	.033	.039	.031	.037	.072	.082	.070	.047	.084	.094	.123	.082	.097	.099	.076	1.119
4.00	.035	.047	.039	.043	.035	.045	.051	.070	.045	.111	.162	.152	.084	.055	.051	.051	1.074
5.00	.029	.021	.029	.041	.041	.031	.010	.014	.016	.078	.107	.053	.037	.027	.019	.041	.594
6.00	.018	.010	.010	.019	.035	.010	.004	.002	.002	.041	.088	.019	.012	.014	.010	.008	.300
8.00	.008	.004	.002	.019	.019	.006	.002	.000	.000	.021	.057	.006	.004	.018	.006	.004	.175
10.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.008	.000	.000	.000	.000	.000	.010
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002
TOTAL	.18	.14	.14	.17	.17	.18	.19	.18	.14	.37	.54	.42	.30	.28	.25	.23	3.87

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.001	.001	.001	.001	.000	.000	.000	.000	.001	.001	.001	.000	.002	.002	.001	.001	.012
1.00	.006	.004	.006	.004	.000	.000	.000	.002	.004	.008	.008	.000	.016	.014	.008	.006	.084
1.50	.006	.016	.006	.012	.004	.004	.006	.014	.008	.012	.016	.019	.025	.031	.025	.010	.212
2.00	.018	.031	.021	.014	.010	.025	.019	.014	.014	.039	.047	.060	.041	.033	.039	.029	.454
3.00	.074	.062	.051	.035	.033	.060	.055	.078	.074	.074	.117	.144	.107	.088	.078	.105	1.236
4.00	.041	.033	.072	.074	.039	.047	.047	.033	.027	.117	.156	.134	.076	.066	.053	.070	1.086
5.00	.043	.021	.023	.074	.031	.029	.018	.012	.014	.076	.111	.064	.055	.039	.027	.027	.665
6.00	.023	.039	.018	.043	.021	.029	.006	.006	.010	.049	.078	.023	.051	.023	.008	.018	.444
8.00	.006	.016	.014	.031	.031	.012	.004	.000	.000	.037	.097	.014	.008	.010	.006	.008	.292
10.00	.000	.002	.000	.006	.002	.000	.000	.000	.000	.000	.016	.000	.000	.000	.000	.000	.025
20.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.004
TOTAL	.22	.22	.21	.29	.17	.21	.15	.16	.15	.41	.65	.46	.38	.31	.24	.27	4.51

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.007	.006	.006	.001	.001	.002	.003	.002	.005	.009	.009	.017	.020	.020	.013	.011	.133
1.00	.039	.035	.035	.008	.008	.010	.018	.012	.027	.049	.053	.095	.117	.113	.076	.062	.756
1.50	.123	.111	.058	.031	.031	.045	.033	.043	.074	.062	.134	.232	.201	.226	.185	.142	1.733
2.00	.154	.218	.125	.058	.053	.099	.078	.095	.115	.117	.285	.493	.362	.257	.324	.232	3.066
3.00	.304	.374	.604	.296	.251	.374	.374	.253	.353	.481	.926	.994	.665	.631	.575	.645	8.101
4.00	.324	.238	.723	.495	.400	.378	.345	.216	.345	.624	.978	.702	.470	.368	.341	.437	7.382
5.00	.325	.207	.435	.433	.306	.271	.146	.129	.203	.649	.861	.310	.222	.220	.166	.171	5.053
6.00	.160	.195	.185	.195	.246	.101	.027	.037	.066	.337	.614	.103	.097	.154	.047	.099	2.664
8.00	.109	.078	.033	.162	.195	.084	.023	.010	.019	.234	.384	.076	.027	.049	.016	.039	1.538
10.00	.010	.031	.004	.010	.049	.002	.008	.004	.000	.006	.076	.008	.002	.000	.000	.000	.209
20.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.004
TOTAL	1.55	1.49	2.21	1.69	1.54	1.37	1.06	.80	1.21	2.57	4.32	3.03	2.18	2.04	1.74	1.84	30.64

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.013	.008	.006	.004	.004	.004	.004	.005	.012	.014	.021	.036	.035	.039	.028	.015	.248
1.00	.097	.060	.043	.033	.027	.029	.029	.041	.094	.103	.162	.277	.269	.300	.212	.113	1.890
1.50	.168	.170	.086	.049	.039	.082	.062	.086	.158	.191	.405	.635	.431	.514	.429	.236	3.740
2.00	.195	.310	.084	.080	.101	.133	.107	.154	.265	.310	.565	.553	.324	.359	.456	.351	4.346
3.00	.362	.353	.474	.304	.304	.417	.421	.427	.587	1.128	.731	.446	.316	.294	.316	.456	7.336
4.00	.193	.131	.281	.259	.255	.372	.294	.279	.419	.947	.349	.111	.107	.140	.107	.123	4.367
5.00	.068	.037	.060	.115	.133	.105	.115	.140	.207	.540	.173	.041	.031	.041	.037	.039	1.883
6.00	.031	.006	.018	.033	.119	.072	.025	.039	.070	.209	.111	.006	.010	.012	.012	.018	.789
8.00	.014	.004	.000	.012	.084	.037	.010	.000	.029	.131	.058	.004	.004	.008	.006	.014	.413
10.00	.000	.000	.000	.008	.023	.004	.000	.004	.002	.004	.008	.000	.002	.002	.000	.000	.057
20.00	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.006

TOTAL	1.14	1.08	1.05	.90	1.09	1.25	1.07	1.17	1.84	3.58	2.58	2.11	1.53	1.71	1.60	1.36	25.07

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.009	.006	.003	.002	.002	.002	.003	.008	.013	.016	.024	.034	.043	.044	.028	.014	.249
1.00	.078	.053	.025	.016	.016	.021	.023	.068	.117	.136	.205	.292	.372	.380	.248	.121	2.171
1.50	.134	.070	.031	.018	.019	.021	.023	.068	.146	.209	.318	.411	.228	.405	.281	.193	2.576
2.00	.193	.094	.016	.012	.021	.066	.072	.080	.111	.181	.205	.103	.076	.138	.101	.142	1.612
3.00	.207	.076	.023	.023	.068	.115	.138	.205	.168	.331	.068	.018	.016	.033	.027	.095	1.612
4.00	.023	.019	.010	.027	.055	.068	.074	.134	.121	.220	.035	.010	.012	.004	.012	.008	.832
5.00	.014	.004	.000	.014	.019	.023	.043	.043	.074	.140	.010	.004	.002	.008	.004	.012	.413
6.00	.004	.000	.000	.002	.014	.004	.018	.018	.041	.033	.002	.004	.000	.002	.000	.000	.140
8.00	.000	.000	.000	.000	.019	.006	.004	.010	.010	.019	.002	.012	.002	.000	.000	.000	.084
10.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.002	.000	.000	.000	.008
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.002
TOTAL	.66	.32	.11	.11	.23	.33	.40	.63	.80	1.29	.87	.89	.75	1.01	.70	.58	9.70

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.003	.001	.001	.000	.000	.001	.001	.001	.002	.003	.006	.015	.028	.038	.018	.009	.127
1.00	.037	.019	.008	.004	.002	.018	.012	.014	.027	.041	.082	.199	.390	.520	.240	.123	1.734
1.50	.086	.029	.012	.006	.006	.023	.033	.019	.018	.082	.070	.162	.136	.427	.193	.134	1.436
2.00	.058	.006	.000	.006	.016	.039	.055	.029	.021	.057	.039	.045	.012	.051	.019	.072	.524
3.00	.047	.019	.004	.006	.019	.060	.095	.076	.041	.057	.021	.004	.004	.006	.006	.041	.507
4.00	.004	.000	.000	.002	.027	.037	.039	.051	.016	.035	.010	.002	.000	.002	.000	.000	.224
5.00	.002	.000	.000	.000	.012	.018	.027	.021	.010	.021	.014	.008	.000	.000	.000	.000	.133
6.00	.000	.000	.000	.000	.002	.002	.010	.010	.000	.004	.002	.002	.000	.000	.000	.000	.031
8.00	.000	.000	.000	.000	.000	.002	.002	.004	.000	.000	.000	.000	.000	.000	.000	.000	.008
10.00	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
20.00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL	.24	.08	.02	.02	.09	.20	.27	.23	.13	.30	.24	.44	.57	1.04	.48	.38	4.73

TOTAL HOURS CONSIDERED ARE 51312
0WIND MEASURED AT 10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.6	3.8	4.5	4.3	4.7	5.5	5.2	4.7	5.4	10.4	10.6	8.7	7.1	8.1	6.5	5.8	100.0

0OVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.340	1.000	1.500	2.000	3.000	4.000	5.000	6.000	8.000	10.000	20.000
AVE WIND SPEED (M/S):	.170	.670	1.250	1.750	2.500	3.500	4.500	5.500	7.000	9.000	15.000
WIND SPEED FREQUENCY:	.90	6.87	10.58	12.10	26.98	21.70	11.84	5.59	3.08	.34	.02

0DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.528E-05	1.315E-05	6.410E-06	3.058E-06	1.153E-06	6.060E-07	3.775E-07	2.606E-07	1.926E-07	1.494E-07	1.201E-07
SSW	3.204E-05	9.322E-06	4.566E-06	2.175E-06	8.157E-07	4.264E-07	2.644E-07	1.817E-07	1.338E-07	1.034E-07	8.287E-08
SW	2.531E-05	7.284E-06	3.564E-06	1.694E-06	6.322E-07	3.286E-07	2.026E-07	1.386E-07	1.016E-07	7.821E-08	6.246E-08
WSW	1.876E-05	5.306E-06	2.578E-06	1.222E-06	4.566E-07	2.377E-07	1.468E-07	1.006E-07	7.383E-08	5.692E-08	4.551E-08
W	1.981E-05	5.656E-06	2.754E-06	1.309E-06	4.909E-07	2.565E-07	1.589E-07	1.092E-07	8.035E-08	6.207E-08	4.973E-08
WNW	2.844E-05	8.075E-06	3.911E-06	1.859E-06	7.008E-07	3.680E-07	2.290E-07	1.580E-07	1.167E-07	9.042E-08	7.265E-08
NW	2.858E-05	8.076E-06	3.896E-06	1.852E-06	6.999E-07	3.684E-07	2.298E-07	1.588E-07	1.175E-07	9.119E-08	7.338E-08
NNW	3.257E-05	9.326E-06	4.523E-06	2.153E-06	8.134E-07	4.282E-07	2.671E-07	1.846E-07	1.366E-07	1.061E-07	8.534E-08
N	4.607E-05	1.337E-05	6.528E-06	3.111E-06	1.173E-06	6.163E-07	3.838E-07	2.648E-07	1.956E-07	1.517E-07	1.219E-07
NNE	7.447E-05	2.162E-05	1.056E-05	5.033E-06	1.896E-06	9.956E-07	6.198E-07	4.275E-07	3.157E-07	2.447E-07	1.967E-07
NE	8.555E-05	2.487E-05	1.215E-05	5.793E-06	2.178E-06	1.141E-06	7.091E-07	4.883E-07	3.601E-07	2.787E-07	2.237E-07
ENE	1.077E-04	3.129E-05	1.525E-05	7.280E-06	2.747E-06	1.445E-06	9.008E-07	6.222E-07	4.600E-07	3.570E-07	2.871E-07
E	1.130E-04	3.268E-05	1.584E-05	7.569E-06	2.869E-06	1.515E-06	9.482E-07	6.571E-07	4.873E-07	3.791E-07	3.057E-07
ESE	1.442E-04	4.171E-05	2.018E-05	9.652E-06	3.669E-06	1.943E-06	1.219E-06	8.469E-07	6.293E-07	4.905E-07	3.961E-07
SE	9.117E-05	2.639E-05	1.281E-05	6.119E-06	2.317E-06	1.223E-06	7.648E-07	5.297E-07	3.926E-07	3.053E-07	2.460E-07
SSE	6.383E-05	1.847E-05	8.980E-06	4.286E-06	1.620E-06	8.529E-07	5.323E-07	3.680E-07	2.723E-07	2.115E-07	1.702E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.926E-08	5.094E-08	3.307E-08	1.907E-08	1.298E-08	9.656E-09	7.595E-09	6.207E-09	5.215E-09	4.475E-09	3.905E-09
SSW	6.831E-08	3.466E-08	2.231E-08	1.270E-08	8.572E-09	6.334E-09	4.954E-09	4.029E-09	3.371E-09	2.882E-09	2.506E-09
SW	5.132E-08	2.570E-08	1.638E-08	9.200E-09	6.147E-09	4.508E-09	3.504E-09	2.835E-09	2.362E-09	2.011E-09	1.743E-09
WSW	3.744E-08	1.886E-08	1.207E-08	6.832E-09	4.594E-09	3.386E-09	2.644E-09	2.147E-09	1.795E-09	1.533E-09	1.332E-09
W	4.098E-08	2.078E-08	1.337E-08	7.611E-09	5.135E-09	3.794E-09	2.968E-09	2.415E-09	2.021E-09	1.728E-09	1.503E-09
WNW	6.004E-08	3.077E-08	1.996E-08	1.150E-08	7.828E-09	5.825E-09	4.583E-09	3.747E-09	3.149E-09	2.703E-09	2.360E-09
NW	6.072E-08	3.129E-08	2.038E-08	1.181E-08	8.072E-09	6.026E-09	4.754E-09	3.895E-09	3.280E-09	2.820E-09	2.465E-09
NNW	7.062E-08	3.638E-08	2.369E-08	1.371E-08	9.362E-09	6.981E-09	5.502E-09	4.504E-09	3.789E-09	3.256E-09	2.844E-09
N	1.007E-07	5.161E-08	3.346E-08	1.924E-08	1.307E-08	9.705E-09	7.622E-09	6.220E-09	5.220E-09	4.474E-09	3.900E-09
NNE	1.625E-07	8.324E-08	5.396E-08	3.104E-08	2.108E-08	1.566E-08	1.230E-08	1.004E-08	8.429E-09	7.226E-09	6.299E-09
NE	1.846E-07	9.418E-08	6.086E-08	3.486E-08	2.362E-08	1.751E-08	1.373E-08	1.119E-08	9.382E-09	8.035E-09	6.998E-09
ENE	2.374E-07	1.221E-07	7.933E-08	4.581E-08	3.121E-08	2.324E-08	1.829E-08	1.496E-08	1.258E-08	1.080E-08	9.424E-09
E	2.533E-07	1.314E-07	8.595E-08	5.011E-08	3.438E-08	2.574E-08	2.035E-08	1.670E-08	1.409E-08	1.213E-08	1.062E-08
ESE	3.287E-07	1.714E-07	1.126E-07	6.603E-08	4.548E-08	3.415E-08	2.707E-08	2.226E-08	1.881E-08	1.622E-08	1.422E-08
SE	2.038E-07	1.055E-07	6.893E-08	4.011E-08	2.747E-08	2.054E-08	1.622E-08	1.330E-08	1.121E-08	9.648E-09	8.438E-09
SSE	1.409E-07	7.261E-08	4.730E-08	2.741E-08	1.872E-08	1.397E-08	1.101E-08	9.019E-09	7.592E-09	6.526E-09	5.703E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50

S	6.418E-06	1.333E-06	3.917E-07	1.955E-07	1.210E-07	5.374E-08	1.948E-08	9.718E-09	6.226E-09	4.483E-09
SSW	4.560E-06	9.448E-07	2.745E-07	1.359E-07	8.356E-08	3.665E-08	1.300E-08	6.379E-09	4.043E-09	2.888E-09
SW	3.560E-06	7.333E-07	2.106E-07	1.033E-07	6.300E-08	2.725E-08	9.439E-09	4.543E-09	2.846E-09	2.016E-09
WSW	2.581E-06	5.293E-07	1.526E-07	7.503E-08	4.590E-08	1.997E-08	7.002E-09	3.411E-09	2.155E-09	1.536E-09
W	2.757E-06	5.684E-07	1.651E-07	8.163E-08	5.015E-08	2.198E-08	7.790E-09	3.821E-09	2.423E-09	1.732E-09
WNW	3.924E-06	8.103E-07	2.377E-07	1.185E-07	7.324E-08	3.247E-08	1.175E-08	5.862E-09	3.758E-09	2.708E-09
NW	3.917E-06	8.087E-07	2.384E-07	1.193E-07	7.397E-08	3.298E-08	1.205E-08	6.063E-09	3.906E-09	2.825E-09
NNW	4.537E-06	9.400E-07	2.771E-07	1.387E-07	8.603E-08	3.835E-08	1.400E-08	7.024E-09	4.517E-09	3.261E-09
N	6.529E-06	1.356E-06	3.982E-07	1.987E-07	1.229E-07	5.446E-08	1.966E-08	9.769E-09	6.240E-09	4.482E-09
NNE	1.056E-05	2.193E-06	6.431E-07	3.206E-07	1.983E-07	8.784E-08	3.171E-08	1.576E-08	1.007E-08	7.239E-09
NE	1.215E-05	2.521E-06	7.360E-07	3.657E-07	2.256E-07	9.948E-08	3.564E-08	1.763E-08	1.123E-08	8.050E-09
ENE	1.527E-05	3.176E-06	9.345E-07	4.671E-07	2.894E-07	1.287E-07	4.677E-08	2.339E-08	1.500E-08	1.082E-08
E	1.591E-05	3.312E-06	9.830E-07	4.946E-07	3.081E-07	1.383E-07	5.108E-08	2.589E-08	1.675E-08	1.215E-08
ESE	2.029E-05	4.231E-06	1.263E-06	6.386E-07	3.991E-07	1.803E-07	6.725E-08	3.434E-08	2.232E-08	1.625E-08
SE	1.285E-05	2.676E-06	7.930E-07	3.985E-07	2.479E-07	1.111E-07	4.089E-08	2.066E-08	1.334E-08	9.664E-09
SSE	9.004E-06	1.871E-06	5.521E-07	2.765E-07	1.716E-07	7.653E-08	2.797E-08	1.405E-08	9.045E-09	6.537E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.520E-05	1.310E-05	6.376E-06	3.036E-06	1.141E-06	5.974E-07	3.709E-07	2.551E-07	1.878E-07	1.452E-07	1.163E-07
SSW	3.198E-05	9.291E-06	4.542E-06	2.160E-06	8.075E-07	4.207E-07	2.600E-07	1.781E-07	1.306E-07	1.006E-07	8.038E-08
SW	2.528E-05	7.263E-06	3.550E-06	1.685E-06	6.269E-07	3.249E-07	1.998E-07	1.363E-07	9.960E-08	7.646E-08	6.089E-08
WSW	1.874E-05	5.293E-06	2.568E-06	1.216E-06	4.532E-07	2.354E-07	1.450E-07	9.909E-08	7.255E-08	5.579E-08	4.449E-08
W	1.979E-05	5.644E-06	2.745E-06	1.303E-06	4.878E-07	2.543E-07	1.573E-07	1.078E-07	7.917E-08	6.104E-08	4.880E-08
WNW	2.840E-05	8.056E-06	3.897E-06	1.851E-06	6.958E-07	3.645E-07	2.264E-07	1.558E-07	1.147E-07	8.872E-08	7.112E-08
NW	2.855E-05	8.057E-06	3.882E-06	1.844E-06	6.949E-07	3.649E-07	2.271E-07	1.566E-07	1.155E-07	8.949E-08	7.185E-08
NNW	3.252E-05	9.298E-06	4.503E-06	2.141E-06	8.061E-07	4.231E-07	2.632E-07	1.814E-07	1.338E-07	1.036E-07	8.310E-08
N	4.598E-05	1.332E-05	6.493E-06	3.089E-06	1.160E-06	6.075E-07	3.770E-07	2.592E-07	1.908E-07	1.474E-07	1.180E-07
NNE	7.436E-05	2.156E-05	1.051E-05	5.002E-06	1.879E-06	9.837E-07	6.105E-07	4.199E-07	3.092E-07	2.389E-07	1.914E-07
NE	8.539E-05	2.478E-05	1.209E-05	5.750E-06	2.154E-06	1.124E-06	6.959E-07	4.774E-07	3.507E-07	2.705E-07	2.163E-07
ENE	1.074E-04	3.115E-05	1.515E-05	7.212E-06	2.709E-06	1.418E-06	8.798E-07	6.048E-07	4.451E-07	3.437E-07	2.752E-07
E	1.127E-04	3.249E-05	1.571E-05	7.483E-06	2.820E-06	1.481E-06	9.215E-07	6.349E-07	4.682E-07	3.622E-07	2.904E-07
ESE	1.438E-04	4.149E-05	2.002E-05	9.548E-06	3.610E-06	1.902E-06	1.187E-06	8.199E-07	6.060E-07	4.698E-07	3.774E-07
SE	9.094E-05	2.626E-05	1.272E-05	6.058E-06	2.282E-06	1.199E-06	7.458E-07	5.139E-07	3.790E-07	2.932E-07	2.351E-07
SSE	6.370E-05	1.840E-05	8.924E-06	4.251E-06	1.599E-06	8.388E-07	5.213E-07	3.589E-07	2.645E-07	2.046E-07	1.640E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.580E-08	4.833E-08	3.085E-08	1.722E-08	1.136E-08	8.199E-09	6.265E-09	4.978E-09	4.071E-09	3.402E-09	2.893E-09
SSW	6.603E-08	3.295E-08	2.086E-08	1.151E-08	7.532E-09	5.404E-09	4.109E-09	3.251E-09	2.649E-09	2.206E-09	1.871E-09
SW	4.988E-08	2.463E-08	1.548E-08	8.465E-09	5.511E-09	3.941E-09	2.991E-09	2.364E-09	1.925E-09	1.604E-09	1.361E-09
WSW	3.651E-08	1.815E-08	1.148E-08	6.333E-09	4.157E-09	2.994E-09	2.286E-09	1.817E-09	1.487E-09	1.245E-09	1.061E-09
W	4.013E-08	2.014E-08	1.283E-08	7.162E-09	4.742E-09	3.441E-09	2.645E-09	2.116E-09	1.742E-09	1.466E-09	1.256E-09
WNW	5.863E-08	2.970E-08	1.905E-08	1.073E-08	7.151E-09	5.212E-09	4.020E-09	3.223E-09	2.658E-09	2.240E-09	1.920E-09
NW	5.931E-08	3.022E-08	1.947E-08	1.105E-08	7.395E-09	5.412E-09	4.188E-09	3.368E-09	2.786E-09	2.354E-09	2.022E-09
NNW	6.856E-08	3.482E-08	2.236E-08	1.260E-08	8.382E-09	6.098E-09	4.694E-09	3.756E-09	3.091E-09	2.600E-09	2.225E-09
N	9.721E-08	4.895E-08	3.120E-08	1.737E-08	1.143E-08	8.238E-09	6.287E-09	4.991E-09	4.078E-09	3.406E-09	2.896E-09
NNE	1.577E-07	7.961E-08	5.087E-08	2.846E-08	1.883E-08	1.363E-08	1.045E-08	8.329E-09	6.832E-09	5.729E-09	4.887E-09
NE	1.778E-07	8.902E-08	5.648E-08	3.122E-08	2.043E-08	1.465E-08	1.113E-08	8.797E-09	7.158E-09	5.956E-09	5.043E-09

ENE	2.265E-07	1.138E-07	7.227E-08	3.993E-08	2.608E-08	1.864E-08	1.410E-08	1.110E-08	8.995E-09	7.452E-09	6.282E-09
E	2.393E-07	1.207E-07	7.680E-08	4.245E-08	2.767E-08	1.972E-08	1.487E-08	1.166E-08	9.404E-09	7.756E-09	6.510E-09
ESE	3.116E-07	1.583E-07	1.013E-07	5.654E-08	3.713E-08	2.663E-08	2.019E-08	1.591E-08	1.290E-08	1.069E-08	9.005E-09
SE	1.938E-07	9.789E-08	6.243E-08	3.466E-08	2.270E-08	1.625E-08	1.231E-08	9.697E-09	7.860E-09	6.512E-09	5.490E-09
SSE	1.351E-07	6.825E-08	4.358E-08	2.429E-08	1.598E-08	1.150E-08	8.763E-09	6.940E-09	5.656E-09	4.711E-09	3.992E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.386E-06	1.321E-06	3.850E-07	1.908E-07	1.173E-07	5.111E-08	1.764E-08	8.267E-09	5.000E-09	3.412E-09
SSW	4.539E-06	9.362E-07	2.701E-07	1.328E-07	8.106E-08	3.493E-08	1.182E-08	5.453E-09	3.266E-09	2.213E-09
SW	3.546E-06	7.278E-07	2.078E-07	1.013E-07	6.143E-08	2.618E-08	8.712E-09	3.980E-09	2.376E-09	1.609E-09
WSW	2.573E-06	5.259E-07	1.507E-07	7.375E-08	4.488E-08	1.926E-08	6.509E-09	3.021E-09	1.825E-09	1.248E-09
W	2.749E-06	5.652E-07	1.634E-07	8.045E-08	4.922E-08	2.133E-08	7.345E-09	3.470E-09	2.125E-09	1.470E-09
WNW	3.912E-06	8.052E-07	2.350E-07	1.165E-07	7.171E-08	3.140E-08	1.099E-08	5.252E-09	3.235E-09	2.245E-09
NW	3.904E-06	8.035E-07	2.356E-07	1.173E-07	7.243E-08	3.191E-08	1.130E-08	5.451E-09	3.381E-09	2.359E-09
NNW	4.519E-06	9.324E-07	2.731E-07	1.359E-07	8.378E-08	3.678E-08	1.289E-08	6.146E-09	3.771E-09	2.607E-09
N	6.496E-06	1.343E-06	3.913E-07	1.938E-07	1.190E-07	5.178E-08	1.780E-08	8.309E-09	5.013E-09	3.416E-09
NNE	1.052E-05	2.175E-06	6.338E-07	3.140E-07	1.930E-07	8.419E-08	2.916E-08	1.374E-08	8.365E-09	5.744E-09
NE	1.209E-05	2.495E-06	7.227E-07	3.564E-07	2.181E-07	9.429E-08	3.204E-08	1.479E-08	8.839E-09	5.974E-09
ENE	1.518E-05	3.136E-06	9.133E-07	4.521E-07	2.774E-07	1.204E-07	4.096E-08	1.881E-08	1.116E-08	7.476E-09
E	1.578E-05	3.261E-06	9.560E-07	4.754E-07	2.927E-07	1.275E-07	4.352E-08	1.990E-08	1.172E-08	7.783E-09
ESE	2.014E-05	4.170E-06	1.231E-06	6.152E-07	3.804E-07	1.670E-07	5.787E-08	2.685E-08	1.599E-08	1.072E-08
SE	1.277E-05	2.640E-06	7.738E-07	3.849E-07	2.370E-07	1.034E-07	3.551E-08	1.639E-08	9.744E-09	6.533E-09
SSE	8.953E-06	1.851E-06	5.410E-07	2.686E-07	1.653E-07	7.215E-08	2.488E-08	1.160E-08	6.972E-09	4.725E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.283E-05	1.200E-05	5.704E-06	2.672E-06	9.763E-07	4.998E-07	3.043E-07	2.057E-07	1.492E-07	1.137E-07	8.995E-08
SSW	3.031E-05	8.505E-06	4.063E-06	1.900E-06	6.908E-07	3.518E-07	2.131E-07	1.435E-07	1.037E-07	7.876E-08	6.211E-08
SW	2.395E-05	6.646E-06	3.173E-06	1.481E-06	5.356E-07	2.712E-07	1.635E-07	1.096E-07	7.883E-08	5.965E-08	4.688E-08
WSW	1.775E-05	4.842E-06	2.295E-06	1.068E-06	3.869E-07	1.963E-07	1.185E-07	7.956E-08	5.732E-08	4.344E-08	3.419E-08
W	1.874E-05	5.162E-06	2.452E-06	1.144E-06	4.161E-07	2.119E-07	1.284E-07	8.642E-08	6.243E-08	4.742E-08	3.740E-08
WNW	2.690E-05	7.369E-06	3.481E-06	1.625E-06	5.940E-07	3.039E-07	1.849E-07	1.250E-07	9.060E-08	6.904E-08	5.460E-08
NW	2.704E-05	7.370E-06	3.469E-06	1.619E-06	5.932E-07	3.042E-07	1.855E-07	1.256E-07	9.123E-08	6.963E-08	5.515E-08
NNW	3.081E-05	8.509E-06	4.026E-06	1.882E-06	6.890E-07	3.534E-07	2.155E-07	1.459E-07	1.060E-07	8.086E-08	6.403E-08
N	4.358E-05	1.219E-05	5.808E-06	2.718E-06	9.931E-07	5.082E-07	3.093E-07	2.091E-07	1.516E-07	1.155E-07	9.132E-08

NNE	7.045E-05	1.973E-05	9.397E-06	4.398E-06	1.606E-06	8.216E-07	4.999E-07	3.378E-07	2.449E-07	1.866E-07	1.475E-07
NE	8.092E-05	2.269E-05	1.081E-05	5.061E-06	1.844E-06	9.410E-07	5.713E-07	3.854E-07	2.789E-07	2.121E-07	1.675E-07
ENE	1.019E-04	2.854E-05	1.357E-05	6.355E-06	2.324E-06	1.190E-06	7.248E-07	4.902E-07	3.556E-07	2.711E-07	2.144E-07
E	1.068E-04	2.979E-05	1.408E-05	6.604E-06	2.424E-06	1.247E-06	7.618E-07	5.169E-07	3.759E-07	2.872E-07	2.277E-07
ESE	1.364E-04	3.803E-05	1.794E-05	8.423E-06	3.101E-06	1.599E-06	9.801E-07	6.665E-07	4.858E-07	3.719E-07	2.953E-07
SE	8.623E-05	2.406E-05	1.139E-05	5.341E-06	1.960E-06	1.007E-06	6.151E-07	4.171E-07	3.033E-07	2.317E-07	1.836E-07
SSE	6.038E-05	1.685E-05	7.988E-06	3.743E-06	1.371E-06	7.029E-07	4.286E-07	2.902E-07	2.107E-07	1.608E-07	1.273E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	7.324E-08	3.537E-08	2.177E-08	1.150E-08	7.280E-09	5.081E-09	3.773E-09	2.924E-09	2.337E-09	1.913E-09	1.596E-09
SSW	5.042E-08	2.408E-08	1.470E-08	7.671E-09	4.814E-09	3.338E-09	2.465E-09	1.901E-09	1.514E-09	1.235E-09	1.027E-09
SW	3.794E-08	1.789E-08	1.082E-08	5.580E-09	3.472E-09	2.393E-09	1.758E-09	1.351E-09	1.072E-09	8.723E-10	7.237E-10
WSW	2.771E-08	1.315E-08	7.991E-09	4.153E-09	2.602E-09	1.803E-09	1.332E-09	1.027E-09	8.185E-10	6.682E-10	5.562E-10
W	3.037E-08	1.452E-08	8.874E-09	4.648E-09	2.928E-09	2.038E-09	1.511E-09	1.170E-09	9.349E-10	7.656E-10	6.391E-10
WNW	4.445E-08	2.147E-08	1.323E-08	7.007E-09	4.449E-09	3.116E-09	2.321E-09	1.805E-09	1.448E-09	1.189E-09	9.953E-10
NW	4.495E-08	2.184E-08	1.351E-08	7.201E-09	4.592E-09	3.227E-09	2.412E-09	1.880E-09	1.511E-09	1.244E-09	1.043E-09
NNW	5.219E-08	2.532E-08	1.565E-08	8.314E-09	5.287E-09	3.705E-09	2.761E-09	2.147E-09	1.721E-09	1.413E-09	1.182E-09
N	7.432E-08	3.583E-08	2.202E-08	1.160E-08	7.328E-09	5.105E-09	3.784E-09	2.928E-09	2.337E-09	1.911E-09	1.593E-09
NNE	1.201E-07	5.792E-08	3.563E-08	1.881E-08	1.190E-08	8.303E-09	6.166E-09	4.779E-09	3.821E-09	3.130E-09	2.612E-09
NE	1.362E-07	6.532E-08	4.000E-08	2.098E-08	1.320E-08	9.170E-09	6.781E-09	5.235E-09	4.171E-09	3.405E-09	2.832E-09
ENE	1.746E-07	8.430E-08	5.186E-08	2.735E-08	1.726E-08	1.202E-08	8.899E-09	6.876E-09	5.480E-09	4.473E-09	3.721E-09
E	1.858E-07	9.036E-08	5.587E-08	2.966E-08	1.881E-08	1.313E-08	9.737E-09	7.532E-09	6.008E-09	4.906E-09	4.081E-09
ESE	2.413E-07	1.181E-07	7.336E-08	3.921E-08	2.499E-08	1.751E-08	1.304E-08	1.012E-08	8.094E-09	6.627E-09	5.527E-09
SE	1.497E-07	7.278E-08	4.499E-08	2.388E-08	1.514E-08	1.058E-08	7.854E-09	6.082E-09	4.856E-09	3.970E-09	3.307E-09
SSE	1.038E-07	5.028E-08	3.102E-08	1.644E-08	1.042E-08	7.282E-09	5.410E-09	4.193E-09	3.352E-09	2.744E-09	2.288E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.754E-06	1.141E-06	3.170E-07	1.518E-07	9.080E-08	3.774E-08	1.191E-08	5.144E-09	2.943E-09	1.921E-09
SSW	4.089E-06	8.089E-07	2.223E-07	1.056E-07	6.271E-08	2.576E-08	7.962E-09	3.382E-09	1.915E-09	1.241E-09
SW	3.193E-06	6.281E-07	1.707E-07	8.031E-08	4.735E-08	1.921E-08	5.809E-09	2.427E-09	1.361E-09	8.764E-10
WSW	2.316E-06	4.535E-07	1.237E-07	5.839E-08	3.453E-08	1.409E-08	4.317E-09	1.828E-09	1.035E-09	6.713E-10
W	2.473E-06	4.871E-07	1.339E-07	6.357E-08	3.776E-08	1.553E-08	4.822E-09	2.064E-09	1.178E-09	7.689E-10
WNW	3.521E-06	6.942E-07	1.927E-07	9.221E-08	5.512E-08	2.291E-08	7.253E-09	3.154E-09	1.816E-09	1.194E-09
NW	3.514E-06	6.928E-07	1.932E-07	9.283E-08	5.566E-08	2.327E-08	7.444E-09	3.265E-09	1.891E-09	1.249E-09
NNW	4.069E-06	8.049E-07	2.244E-07	1.078E-07	6.463E-08	2.699E-08	8.598E-09	3.749E-09	2.160E-09	1.419E-09
N	5.853E-06	1.161E-06	3.223E-07	1.542E-07	9.218E-08	3.825E-08	1.202E-08	5.169E-09	2.947E-09	1.919E-09
NNE	9.471E-06	1.878E-06	5.209E-07	2.492E-07	1.489E-07	6.183E-08	1.947E-08	8.407E-09	4.810E-09	3.143E-09
NE	1.089E-05	2.157E-06	5.955E-07	2.839E-07	1.691E-07	6.981E-08	2.175E-08	9.289E-09	5.272E-09	3.420E-09
ENE	1.369E-05	2.716E-06	7.550E-07	3.619E-07	2.165E-07	8.995E-08	2.831E-08	1.217E-08	6.922E-09	4.493E-09
E	1.425E-05	2.830E-06	7.931E-07	3.824E-07	2.298E-07	9.624E-08	3.066E-08	1.329E-08	7.582E-09	4.927E-09
ESE	1.818E-05	3.616E-06	1.020E-06	4.940E-07	2.980E-07	1.256E-07	4.048E-08	1.772E-08	1.018E-08	6.654E-09
SE	1.152E-05	2.288E-06	6.404E-07	3.085E-07	1.853E-07	7.753E-08	2.469E-08	1.071E-08	6.121E-09	3.987E-09
SSE	8.071E-06	1.601E-06	4.464E-07	2.144E-07	1.285E-07	5.360E-08	1.701E-08	7.371E-09	4.221E-09	2.755E-09

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Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.074E-07	3.631E-08	1.864E-08	8.864E-09	3.184E-09	1.579E-09	9.297E-10	6.088E-10	4.284E-10	3.175E-10	2.446E-10
SSW	8.853E-08	2.994E-08	1.537E-08	7.308E-09	2.625E-09	1.302E-09	7.665E-10	5.019E-10	3.532E-10	2.617E-10	2.017E-10
SW	1.053E-07	3.561E-08	1.828E-08	8.692E-09	3.122E-09	1.548E-09	9.117E-10	5.970E-10	4.201E-10	3.113E-10	2.399E-10
WSW	9.867E-08	3.337E-08	1.713E-08	8.145E-09	2.926E-09	1.451E-09	8.543E-10	5.594E-10	3.936E-10	2.917E-10	2.248E-10
W	1.078E-07	3.645E-08	1.871E-08	8.897E-09	3.196E-09	1.585E-09	9.332E-10	6.110E-10	4.300E-10	3.186E-10	2.456E-10
WNW	1.272E-07	4.303E-08	2.209E-08	1.050E-08	3.773E-09	1.871E-09	1.102E-09	7.214E-10	5.076E-10	3.762E-10	2.899E-10
NW	1.208E-07	4.085E-08	2.097E-08	9.970E-09	3.581E-09	1.776E-09	1.046E-09	6.848E-10	4.818E-10	3.571E-10	2.752E-10
NNW	1.088E-07	3.679E-08	1.889E-08	8.981E-09	3.226E-09	1.600E-09	9.420E-10	6.168E-10	4.340E-10	3.217E-10	2.479E-10
N	1.260E-07	4.262E-08	2.188E-08	1.040E-08	3.737E-09	1.853E-09	1.091E-09	7.145E-10	5.028E-10	3.726E-10	2.871E-10
NNE	2.402E-07	8.123E-08	4.171E-08	1.983E-08	7.122E-09	3.532E-09	2.080E-09	1.362E-09	9.583E-10	7.102E-10	5.473E-10
NE	2.459E-07	8.314E-08	4.269E-08	2.030E-08	7.290E-09	3.615E-09	2.129E-09	1.394E-09	9.808E-10	7.269E-10	5.601E-10
ENE	2.016E-07	6.817E-08	3.500E-08	1.664E-08	5.977E-09	2.964E-09	1.745E-09	1.143E-09	8.042E-10	5.960E-10	4.593E-10
E	1.656E-07	5.599E-08	2.875E-08	1.367E-08	4.910E-09	2.435E-09	1.434E-09	9.387E-10	6.605E-10	4.895E-10	3.772E-10
ESE	1.872E-07	6.331E-08	3.251E-08	1.545E-08	5.551E-09	2.753E-09	1.621E-09	1.061E-09	7.469E-10	5.535E-10	4.265E-10
SE	1.508E-07	5.099E-08	2.618E-08	1.245E-08	4.471E-09	2.217E-09	1.306E-09	8.549E-10	6.015E-10	4.458E-10	3.435E-10
SSE	1.342E-07	4.538E-08	2.330E-08	1.108E-08	3.979E-09	1.973E-09	1.162E-09	7.608E-10	5.354E-10	3.968E-10	3.057E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.943E-10	8.634E-11	5.230E-11	2.643E-11	1.600E-11	1.073E-11	7.687E-12	5.772E-12	4.488E-12	3.585E-12	2.926E-12
SSW	1.602E-10	7.118E-11	4.312E-11	2.179E-11	1.319E-11	8.844E-12	6.337E-12	4.759E-12	3.700E-12	2.956E-12	2.412E-12
SW	1.906E-10	8.466E-11	5.129E-11	2.592E-11	1.569E-11	1.052E-11	7.538E-12	5.660E-12	4.401E-12	3.515E-12	2.869E-12
WSW	1.786E-10	7.933E-11	4.806E-11	2.429E-11	1.470E-11	9.857E-12	7.063E-12	5.304E-12	4.124E-12	3.294E-12	2.689E-12
W	1.951E-10	8.666E-11	5.249E-11	2.653E-11	1.606E-11	1.077E-11	7.715E-12	5.793E-12	4.505E-12	3.598E-12	2.937E-12
WNW	2.303E-10	1.023E-10	6.197E-11	3.132E-11	1.896E-11	1.271E-11	9.109E-12	6.840E-12	5.318E-12	4.248E-12	3.467E-12
NW	2.186E-10	9.712E-11	5.883E-11	2.973E-11	1.800E-11	1.207E-11	8.646E-12	6.492E-12	5.048E-12	4.032E-12	3.291E-12
NNW	1.969E-10	8.748E-11	5.299E-11	2.679E-11	1.621E-11	1.087E-11	7.789E-12	5.848E-12	4.547E-12	3.632E-12	2.965E-12
N	2.281E-10	1.013E-10	6.139E-11	3.103E-11	1.878E-11	1.259E-11	9.022E-12	6.775E-12	5.267E-12	4.208E-12	3.434E-12
NNE	4.348E-10	1.931E-10	1.170E-10	5.914E-11	3.579E-11	2.400E-11	1.720E-11	1.291E-11	1.004E-11	8.019E-12	6.546E-12
NE	4.450E-10	1.977E-10	1.197E-10	6.053E-11	3.663E-11	2.456E-11	1.760E-11	1.322E-11	1.028E-11	8.208E-12	6.700E-12
ENE	3.649E-10	1.621E-10	9.819E-11	4.963E-11	3.004E-11	2.014E-11	1.443E-11	1.084E-11	8.425E-12	6.730E-12	5.493E-12
E	2.997E-10	1.331E-10	8.064E-11	4.076E-11	2.467E-11	1.654E-11	1.185E-11	8.900E-12	6.920E-12	5.528E-12	4.512E-12
ESE	3.389E-10	1.505E-10	9.118E-11	4.609E-11	2.790E-11	1.870E-11	1.340E-11	1.006E-11	7.824E-12	6.250E-12	5.102E-12
SE	2.729E-10	1.212E-10	7.344E-11	3.712E-11	2.247E-11	1.506E-11	1.079E-11	8.105E-12	6.302E-12	5.034E-12	4.109E-12
SSE	2.429E-10	1.079E-10	6.536E-11	3.304E-11	2.000E-11	1.341E-11	9.607E-12	7.214E-12	5.609E-12	4.480E-12	3.657E-12

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Fermi COL B (with Staff JFD)

Ground Level/Radwaste Bldg

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.822E-08	3.733E-09	9.745E-10	4.377E-10	2.476E-10	9.521E-11	2.754E-11	1.092E-11	5.830E-12	3.608E-12
SSW	1.502E-08	3.078E-09	8.034E-10	3.608E-10	2.041E-10	7.850E-11	2.271E-11	9.001E-12	4.807E-12	2.975E-12

SW	1.787E-08	3.660E-09	9.556E-10	4.292E-10	2.428E-10	9.337E-11	2.701E-11	1.071E-11	5.717E-12	3.538E-12
WSW	1.675E-08	3.430E-09	8.954E-10	4.022E-10	2.275E-10	8.749E-11	2.531E-11	1.003E-11	5.357E-12	3.316E-12
W	1.829E-08	3.747E-09	9.781E-10	4.393E-10	2.485E-10	9.557E-11	2.765E-11	1.096E-11	5.852E-12	3.622E-12
WNW	2.159E-08	4.423E-09	1.155E-09	5.186E-10	2.934E-10	1.128E-10	3.264E-11	1.294E-11	6.908E-12	4.276E-12
NW	2.050E-08	4.199E-09	1.096E-09	4.923E-10	2.785E-10	1.071E-10	3.098E-11	1.228E-11	6.558E-12	4.059E-12
NNW	1.847E-08	3.782E-09	9.874E-10	4.435E-10	2.509E-10	9.648E-11	2.791E-11	1.106E-11	5.907E-12	3.656E-12
N	2.139E-08	4.381E-09	1.144E-09	5.137E-10	2.906E-10	1.118E-10	3.233E-11	1.281E-11	6.843E-12	4.235E-12
NNE	4.077E-08	8.350E-09	2.180E-09	9.791E-10	5.539E-10	2.130E-10	6.162E-11	2.442E-11	1.304E-11	8.072E-12
NE	4.173E-08	8.547E-09	2.231E-09	1.002E-09	5.669E-10	2.180E-10	6.307E-11	2.500E-11	1.335E-11	8.262E-12
ENE	3.421E-08	7.008E-09	1.829E-09	8.217E-10	4.648E-10	1.788E-10	5.171E-11	2.050E-11	1.094E-11	6.774E-12
E	2.810E-08	5.756E-09	1.503E-09	6.749E-10	3.818E-10	1.468E-10	4.247E-11	1.683E-11	8.989E-12	5.564E-12
ESE	3.177E-08	6.508E-09	1.699E-09	7.631E-10	4.317E-10	1.660E-10	4.802E-11	1.903E-11	1.016E-11	6.291E-12
SE	2.559E-08	5.242E-09	1.368E-09	6.146E-10	3.477E-10	1.337E-10	3.868E-11	1.533E-11	8.186E-12	5.067E-12
SSE	2.278E-08	4.665E-09	1.218E-09	5.470E-10	3.094E-10	1.190E-10	3.442E-11	1.364E-11	7.286E-12	4.510E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

0Fermi COL B (with Staff JFD)

0Ground Level/Radwaste Bldg
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3)	X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
		NO DECAY					
+				2.260 DAY DECAY			
+					8.000 DAY DECAY		
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Meat Cow	NNW	3.05	1.8E-07	1.8E-07	1.4E-07	6.0E-10
	Meat Cow	NNE	4.50	2.0E-07	1.9E-07	1.5E-07	5.5E-10
	Milk Cow	WNW	2.18	3.0E-07	3.0E-07	2.5E-07	1.5E-09
	Milk Cow	NW	3.65	1.1E-07	1.1E-07	8.4E-08	4.4E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.266E-06	4.584E-07	2.871E-07	1.771E-07	9.966E-08	6.751E-08	4.988E-08	3.890E-08	3.152E-08	2.627E-08	2.237E-08
SSW	9.088E-07	3.436E-07	2.290E-07	1.508E-07	8.949E-08	6.134E-08	4.525E-08	3.509E-08	2.822E-08	2.334E-08	1.974E-08

SW	1.184E-06	4.507E-07	3.112E-07	2.067E-07	1.162E-07	7.552E-08	5.346E-08	4.015E-08	3.148E-08	2.550E-08	2.119E-08
WSW	1.247E-06	4.707E-07	3.056E-07	1.907E-07	1.002E-07	6.289E-08	4.363E-08	3.234E-08	2.513E-08	2.023E-08	1.693E-08
W	1.659E-06	5.685E-07	3.520E-07	2.142E-07	1.089E-07	6.745E-08	4.653E-08	3.441E-08	2.672E-08	2.151E-08	1.780E-08
WNW	1.917E-06	6.237E-07	3.712E-07	2.285E-07	1.205E-07	7.645E-08	5.361E-08	4.013E-08	3.146E-08	2.553E-08	2.127E-08
NW	1.930E-06	6.048E-07	3.398E-07	2.030E-07	1.069E-07	6.824E-08	4.817E-08	3.629E-08	2.862E-08	2.335E-08	1.965E-08
NNW	1.779E-06	5.695E-07	3.216E-07	1.897E-07	1.005E-07	6.537E-08	4.697E-08	3.593E-08	2.869E-08	2.366E-08	2.024E-08
N	1.853E-06	6.245E-07	3.749E-07	2.310E-07	1.281E-07	8.555E-08	6.251E-08	4.834E-08	3.891E-08	3.225E-08	2.754E-08
NNE	3.752E-06	1.300E-06	7.782E-07	4.557E-07	2.362E-07	1.518E-07	1.084E-07	8.252E-08	6.743E-08	5.679E-08	4.806E-08
NE	2.612E-06	9.983E-07	6.539E-07	4.118E-07	2.311E-07	1.540E-07	1.120E-07	8.615E-08	6.900E-08	5.695E-08	4.812E-08
ENE	1.518E-06	5.890E-07	3.925E-07	2.651E-07	1.702E-07	1.231E-07	9.432E-08	7.524E-08	6.190E-08	5.216E-08	4.481E-08
E	1.215E-06	4.666E-07	2.977E-07	1.969E-07	1.267E-07	9.245E-08	7.158E-08	5.769E-08	4.791E-08	4.072E-08	3.525E-08
ESE	1.361E-06	4.914E-07	3.016E-07	1.971E-07	1.278E-07	9.451E-08	7.403E-08	6.024E-08	5.044E-08	4.317E-08	3.761E-08
SE	1.188E-06	4.266E-07	2.622E-07	1.730E-07	1.130E-07	8.307E-08	6.449E-08	5.199E-08	4.314E-08	3.662E-08	3.166E-08
SSE	1.306E-06	4.701E-07	2.958E-07	1.894E-07	1.136E-07	7.916E-08	5.932E-08	4.664E-08	3.798E-08	3.176E-08	2.712E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.941E-08	1.197E-08	8.674E-09	5.743E-09	4.289E-09	3.425E-09	2.855E-09	2.449E-09	2.145E-09	1.906E-09	1.713E-09
SSW	1.700E-08	1.008E-08	7.076E-09	4.461E-09	3.207E-09	2.481E-09	2.012E-09	1.686E-09	1.447E-09	1.265E-09	1.122E-09
SW	1.798E-08	1.005E-08	6.793E-09	4.069E-09	2.825E-09	2.127E-09	1.688E-09	1.388E-09	1.172E-09	1.010E-09	8.844E-10
WSW	1.447E-08	8.042E-09	5.436E-09	3.275E-09	2.289E-09	1.734E-09	1.381E-09	1.139E-09	9.629E-10	8.292E-10	7.242E-10
W	1.507E-08	8.738E-09	6.102E-09	3.845E-09	2.740E-09	2.066E-09	1.621E-09	1.319E-09	1.104E-09	9.441E-10	8.212E-10
WNW	1.811E-08	1.101E-08	8.012E-09	5.399E-09	3.979E-09	3.014E-09	2.375E-09	1.942E-09	1.632E-09	1.401E-09	1.223E-09
NW	1.689E-08	1.024E-08	7.430E-09	5.008E-09	3.782E-09	2.997E-09	2.424E-09	1.995E-09	1.683E-09	1.448E-09	1.266E-09
NNW	1.765E-08	1.134E-08	8.529E-09	5.947E-09	4.481E-09	3.456E-09	2.738E-09	2.243E-09	1.889E-09	1.624E-09	1.419E-09
N	2.395E-08	1.525E-08	1.132E-08	7.720E-09	5.811E-09	4.579E-09	3.689E-09	3.028E-09	2.544E-09	2.181E-09	1.901E-09
NNE	4.147E-08	2.421E-08	1.691E-08	1.063E-08	7.625E-09	5.888E-09	4.767E-09	3.988E-09	3.418E-09	2.984E-09	2.644E-09
NE	4.145E-08	2.454E-08	1.727E-08	1.094E-08	7.891E-09	6.122E-09	4.976E-09	4.178E-09	3.593E-09	3.147E-09	2.797E-09
ENE	3.913E-08	2.429E-08	1.759E-08	1.155E-08	8.547E-09	6.762E-09	5.588E-09	4.761E-09	4.148E-09	3.677E-09	3.303E-09
E	3.100E-08	1.948E-08	1.421E-08	9.394E-09	6.952E-09	5.482E-09	4.506E-09	3.813E-09	3.296E-09	2.898E-09	2.581E-09
ESE	3.326E-08	2.149E-08	1.601E-08	1.093E-08	8.290E-09	6.674E-09	5.586E-09	4.805E-09	4.217E-09	3.760E-09	3.393E-09
SE	2.779E-08	1.753E-08	1.283E-08	8.552E-09	6.385E-09	5.084E-09	4.222E-09	3.610E-09	3.155E-09	2.803E-09	2.524E-09
SSE	2.357E-08	1.489E-08	1.102E-08	7.606E-09	5.916E-09	4.901E-09	4.210E-09	3.695E-09	3.282E-09	2.934E-09	2.630E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.763E-07	1.026E-07	5.019E-08	3.163E-08	2.243E-08	1.216E-08	5.748E-09	3.427E-09	2.449E-09	1.905E-09
SSW	2.197E-07	9.061E-08	4.548E-08	2.832E-08	1.979E-08	1.028E-08	4.485E-09	2.487E-09	1.688E-09	1.266E-09
SW	2.958E-07	1.182E-07	5.402E-08	3.168E-08	2.128E-08	1.037E-08	4.121E-09	2.137E-09	1.391E-09	1.012E-09
WSW	2.913E-07	1.037E-07	4.425E-08	2.532E-08	1.700E-08	8.312E-09	3.317E-09	1.741E-09	1.141E-09	8.299E-10

W	3.389E-07	1.139E-07	4.726E-08	2.693E-08	1.789E-08	8.973E-09	3.856E-09	2.068E-09	1.323E-09	9.459E-10
WNW	3.639E-07	1.249E-07	5.431E-08	3.168E-08	2.136E-08	1.125E-08	5.349E-09	3.016E-09	1.948E-09	1.404E-09
NW	3.379E-07	1.111E-07	4.877E-08	2.880E-08	1.972E-08	1.047E-08	5.002E-09	2.977E-09	1.999E-09	1.450E-09
NNW	3.181E-07	1.047E-07	4.746E-08	2.884E-08	2.030E-08	1.149E-08	5.869E-09	3.442E-09	2.250E-09	1.626E-09
N	3.664E-07	1.321E-07	6.299E-08	3.907E-08	2.761E-08	1.544E-08	7.671E-09	4.552E-09	3.032E-09	2.185E-09
NNE	7.508E-07	2.475E-07	1.096E-07	6.769E-08	4.821E-08	2.480E-08	1.069E-08	5.903E-09	3.994E-09	2.987E-09
NE	6.228E-07	2.370E-07	1.129E-07	6.931E-08	4.827E-08	2.506E-08	1.099E-08	6.135E-09	4.183E-09	3.150E-09
ENE	3.795E-07	1.704E-07	9.436E-08	6.200E-08	4.488E-08	2.461E-08	1.156E-08	6.769E-09	4.764E-09	3.678E-09
E	2.904E-07	1.271E-07	7.159E-08	4.796E-08	3.530E-08	1.970E-08	9.378E-09	5.484E-09	3.814E-09	2.899E-09
ESE	2.973E-07	1.284E-07	7.397E-08	5.047E-08	3.765E-08	2.167E-08	1.088E-08	6.670E-09	4.804E-09	3.760E-09
SE	2.591E-07	1.130E-07	6.445E-08	4.319E-08	3.170E-08	1.772E-08	8.539E-09	5.086E-09	3.612E-09	2.804E-09
SSE	2.872E-07	1.151E-07	5.954E-08	3.808E-08	2.718E-08	1.510E-08	7.612E-09	4.895E-09	3.685E-09	2.924E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.079E+01	8.088E+01	8.088E+01	8.088E+01	8.088E+01	7.783E+01	6.977E+01	6.022E+01	5.041E+01	4.051E+01
SSW	8.029E+01	7.996E+01	7.996E+01	7.996E+01	7.996E+01	7.759E+01	7.132E+01	6.389E+01	5.626E+01	4.856E+01
SW	7.804E+01	7.736E+01	7.736E+01	7.736E+01	7.736E+01	7.512E+01	6.921E+01	6.221E+01	5.501E+01	4.776E+01
WSW	7.532E+01	7.452E+01	7.452E+01	7.452E+01	7.291E+01	6.746E+01	5.674E+01	4.402E+01	3.096E+01	1.795E+01
W	6.862E+01	6.730E+01	6.730E+01	6.730E+01	6.730E+01	5.760E+01	3.202E+01	7.737E+00	8.830E-01	4.783E-01
WNW	7.149E+01	6.996E+01	6.996E+01	6.996E+01	6.996E+01	5.869E+01	2.903E+01	5.308E+00	5.987E-01	3.742E-01
NW	7.405E+01	7.272E+01	7.272E+01	7.272E+01	7.218E+01	6.405E+01	4.382E+01	2.006E+01	4.213E+00	8.595E-01
NNW	7.541E+01	7.450E+01	7.450E+01	7.450E+01	7.342E+01	6.219E+01	3.500E+01	9.064E+00	1.531E+00	9.223E-01
N	7.626E+01	7.555E+01	7.555E+01	7.555E+01	7.501E+01	6.613E+01	4.394E+01	1.836E+01	3.820E+00	1.430E+00
NNE	7.590E+01	7.595E+01	7.595E+01	7.376E+01	7.141E+01	6.980E+01	6.676E+01	6.315E+01	5.944E+01	5.571E+01
NE	7.801E+01	7.806E+01	7.806E+01	7.806E+01	7.806E+01	7.657E+01	7.263E+01	6.797E+01	6.318E+01	5.835E+01
ENE	8.440E+01	8.449E+01	8.449E+01	8.449E+01	8.449E+01	8.300E+01	7.906E+01	7.439E+01	6.960E+01	6.477E+01
E	8.796E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01	8.818E+01
ESE	8.614E+01	8.631E+01	8.631E+01	8.631E+01	8.631E+01	8.584E+01	8.459E+01	8.310E+01	8.158E+01	8.004E+01
SE	8.606E+01	8.619E+01	8.619E+01	8.619E+01	8.619E+01	8.524E+01	8.274E+01	7.976E+01	7.671E+01	7.363E+01
SSE	8.324E+01	8.334E+01	8.334E+01	8.334E+01	8.334E+01	7.872E+01	6.655E+01	5.211E+01	3.729E+01	2.238E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.266E-06	4.580E-07	2.867E-07	1.768E-07	9.938E-08	6.725E-08	4.963E-08	3.866E-08	3.128E-08	2.603E-08	2.215E-08
SSW	9.084E-07	3.433E-07	2.287E-07	1.506E-07	8.925E-08	6.112E-08	4.504E-08	3.488E-08	2.802E-08	2.315E-08	1.955E-08
SW	1.184E-06	4.503E-07	3.108E-07	2.064E-07	1.159E-07	7.528E-08	5.324E-08	3.994E-08	3.128E-08	2.532E-08	2.102E-08
WSW	1.247E-06	4.703E-07	3.052E-07	1.904E-07	9.994E-08	6.267E-08	4.344E-08	3.216E-08	2.497E-08	2.007E-08	1.679E-08
W	1.658E-06	5.680E-07	3.516E-07	2.139E-07	1.086E-07	6.726E-08	4.636E-08	3.426E-08	2.658E-08	2.138E-08	1.768E-08
WNW	1.916E-06	6.232E-07	3.708E-07	2.281E-07	1.202E-07	7.621E-08	5.339E-08	3.993E-08	3.128E-08	2.536E-08	2.111E-08
NW	1.929E-06	6.043E-07	3.394E-07	2.027E-07	1.066E-07	6.802E-08	4.798E-08	3.611E-08	2.845E-08	2.319E-08	1.950E-08
NNW	1.778E-06	5.690E-07	3.212E-07	1.894E-07	1.003E-07	6.514E-08	4.676E-08	3.573E-08	2.850E-08	2.347E-08	2.006E-08
N	1.852E-06	6.239E-07	3.744E-07	2.306E-07	1.278E-07	8.524E-08	6.221E-08	4.806E-08	3.863E-08	3.199E-08	2.728E-08
NNE	3.750E-06	1.299E-06	7.773E-07	4.550E-07	2.356E-07	1.513E-07	1.079E-07	8.211E-08	6.703E-08	5.640E-08	4.767E-08
NE	2.611E-06	9.975E-07	6.531E-07	4.112E-07	2.306E-07	1.535E-07	1.115E-07	8.568E-08	6.854E-08	5.651E-08	4.769E-08
ENE	1.518E-06	5.885E-07	3.919E-07	2.646E-07	1.697E-07	1.226E-07	9.379E-08	7.471E-08	6.137E-08	5.163E-08	4.428E-08
E	1.215E-06	4.661E-07	2.972E-07	1.965E-07	1.263E-07	9.200E-08	7.112E-08	5.722E-08	4.743E-08	4.023E-08	3.476E-08
ESE	1.360E-06	4.909E-07	3.011E-07	1.967E-07	1.274E-07	9.405E-08	7.354E-08	5.975E-08	4.993E-08	4.266E-08	3.709E-08

SE	1.188E-06	4.261E-07	2.617E-07	1.726E-07	1.126E-07	8.269E-08	6.410E-08	5.160E-08	4.274E-08	3.622E-08	3.126E-08
SSE	1.305E-06	4.697E-07	2.953E-07	1.890E-07	1.132E-07	7.885E-08	5.902E-08	4.634E-08	3.768E-08	3.147E-08	2.684E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.918E-08	1.175E-08	8.456E-09	5.518E-09	4.061E-09	3.196E-09	2.625E-09	2.220E-09	1.916E-09	1.678E-09	1.487E-09
SSW	1.682E-08	9.909E-09	6.910E-09	4.297E-09	3.046E-09	2.324E-09	1.858E-09	1.535E-09	1.299E-09	1.119E-09	9.784E-10
SW	1.782E-08	9.904E-09	6.654E-09	3.939E-09	2.700E-09	2.008E-09	1.573E-09	1.277E-09	1.065E-09	9.059E-10	7.832E-10
WSW	1.433E-08	7.919E-09	5.321E-09	3.167E-09	2.186E-09	1.634E-09	1.286E-09	1.047E-09	8.738E-10	7.431E-10	6.410E-10
W	1.495E-08	8.630E-09	5.998E-09	3.743E-09	2.641E-09	1.971E-09	1.531E-09	1.234E-09	1.024E-09	8.675E-10	7.479E-10
WNW	1.796E-08	1.086E-08	7.865E-09	5.241E-09	3.818E-09	2.857E-09	2.227E-09	1.802E-09	1.499E-09	1.274E-09	1.101E-09
NW	1.674E-08	1.010E-08	7.292E-09	4.865E-09	3.636E-09	2.850E-09	2.280E-09	1.856E-09	1.550E-09	1.320E-09	1.144E-09
NNW	1.748E-08	1.115E-08	8.339E-09	5.738E-09	4.264E-09	3.244E-09	2.536E-09	2.052E-09	1.707E-09	1.451E-09	1.253E-09
N	2.369E-08	1.498E-08	1.104E-08	7.413E-09	5.491E-09	4.257E-09	3.373E-09	2.726E-09	2.257E-09	1.908E-09	1.640E-09
NNE	4.110E-08	2.386E-08	1.657E-08	1.029E-08	7.298E-09	5.569E-09	4.455E-09	3.683E-09	3.119E-09	2.691E-09	2.357E-09
NE	4.102E-08	2.413E-08	1.686E-08	1.053E-08	7.486E-09	5.721E-09	4.581E-09	3.789E-09	3.211E-09	2.771E-09	2.426E-09
ENE	3.860E-08	2.377E-08	1.706E-08	1.101E-08	7.994E-09	6.208E-09	5.036E-09	4.212E-09	3.603E-09	3.136E-09	2.767E-09
E	3.051E-08	1.898E-08	1.370E-08	8.870E-09	6.424E-09	4.958E-09	3.989E-09	3.304E-09	2.798E-09	2.409E-09	2.103E-09
ESE	3.274E-08	2.095E-08	1.545E-08	1.034E-08	7.682E-09	6.060E-09	4.971E-09	4.191E-09	3.606E-09	3.152E-09	2.791E-09
SE	2.740E-08	1.713E-08	1.242E-08	8.123E-09	5.950E-09	4.647E-09	3.786E-09	3.176E-09	2.723E-09	2.375E-09	2.099E-09
SSE	2.329E-08	1.460E-08	1.072E-08	7.282E-09	5.568E-09	4.532E-09	3.824E-09	3.295E-09	2.874E-09	2.523E-09	2.220E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.759E-07	1.023E-07	4.994E-08	3.139E-08	2.220E-08	1.194E-08	5.523E-09	3.199E-09	2.220E-09	1.678E-09
SSW	2.195E-07	9.038E-08	4.526E-08	2.812E-08	1.961E-08	1.011E-08	4.322E-09	2.330E-09	1.537E-09	1.120E-09
SW	2.954E-07	1.180E-07	5.380E-08	3.148E-08	2.110E-08	1.022E-08	3.992E-09	2.018E-09	1.281E-09	9.075E-10
WSW	2.909E-07	1.035E-07	4.406E-08	2.516E-08	1.685E-08	8.189E-09	3.209E-09	1.642E-09	1.049E-09	7.440E-10
W	3.385E-07	1.136E-07	4.709E-08	2.679E-08	1.777E-08	8.865E-09	3.754E-09	1.974E-09	1.239E-09	8.695E-10
WNW	3.635E-07	1.246E-07	5.409E-08	3.150E-08	2.120E-08	1.111E-08	5.192E-09	2.861E-09	1.808E-09	1.277E-09
NW	3.375E-07	1.108E-07	4.857E-08	2.863E-08	1.957E-08	1.033E-08	4.858E-09	2.831E-09	1.860E-09	1.323E-09
NNW	3.177E-07	1.045E-07	4.725E-08	2.865E-08	2.012E-08	1.131E-08	5.661E-09	3.233E-09	2.059E-09	1.454E-09
N	3.659E-07	1.317E-07	6.269E-08	3.879E-08	2.735E-08	1.516E-08	7.364E-09	4.232E-09	2.732E-09	1.912E-09
NNE	7.500E-07	2.469E-07	1.092E-07	6.729E-08	4.782E-08	2.445E-08	1.036E-08	5.584E-09	3.688E-09	2.694E-09
NE	6.221E-07	2.364E-07	1.124E-07	6.885E-08	4.783E-08	2.465E-08	1.058E-08	5.736E-09	3.795E-09	2.774E-09
ENE	3.790E-07	1.699E-07	9.384E-08	6.147E-08	4.436E-08	2.408E-08	1.101E-08	6.215E-09	4.216E-09	3.138E-09
E	2.900E-07	1.266E-07	7.113E-08	4.748E-08	3.481E-08	1.920E-08	8.857E-09	4.962E-09	3.307E-09	2.411E-09
ESE	2.969E-07	1.280E-07	7.349E-08	4.997E-08	3.713E-08	2.113E-08	1.029E-08	6.057E-09	4.191E-09	3.153E-09
SE	2.587E-07	1.126E-07	6.406E-08	4.279E-08	3.130E-08	1.732E-08	8.112E-09	4.650E-09	3.178E-09	2.376E-09
SSE	2.868E-07	1.148E-07	5.924E-08	3.779E-08	2.690E-08	1.481E-08	7.284E-09	4.525E-09	3.286E-09	2.515E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.209E-06	4.267E-07	2.648E-07	1.636E-07	9.247E-08	6.268E-08	4.626E-08	3.602E-08	2.911E-08	2.421E-08	2.057E-08
SSW	8.689E-07	3.206E-07	2.127E-07	1.409E-07	8.410E-08	5.766E-08	4.246E-08	3.283E-08	2.632E-08	2.171E-08	1.830E-08
SW	1.134E-06	4.213E-07	2.903E-07	1.939E-07	1.091E-07	7.060E-08	4.971E-08	3.712E-08	2.895E-08	2.333E-08	1.929E-08
WSW	1.197E-06	4.412E-07	2.847E-07	1.780E-07	9.327E-08	5.823E-08	4.015E-08	2.959E-08	2.286E-08	1.830E-08	1.525E-08
W	1.588E-06	5.294E-07	3.249E-07	1.977E-07	1.001E-07	6.165E-08	4.226E-08	3.107E-08	2.398E-08	1.920E-08	1.581E-08
WNW	1.845E-06	5.844E-07	3.441E-07	2.118E-07	1.115E-07	7.043E-08	4.913E-08	3.659E-08	2.855E-08	2.306E-08	1.913E-08
NW	1.862E-06	5.683E-07	3.148E-07	1.877E-07	9.861E-08	6.267E-08	4.403E-08	3.301E-08	2.591E-08	2.105E-08	1.765E-08
NNW	1.709E-06	5.323E-07	2.961E-07	1.745E-07	9.257E-08	6.012E-08	4.310E-08	3.288E-08	2.619E-08	2.153E-08	1.840E-08
N	1.774E-06	5.810E-07	3.444E-07	2.127E-07	1.186E-07	7.928E-08	5.789E-08	4.470E-08	3.591E-08	2.971E-08	2.533E-08
NNE	3.579E-06	1.204E-06	7.112E-07	4.157E-07	2.156E-07	1.385E-07	9.870E-08	7.498E-08	6.127E-08	5.158E-08	4.356E-08
NE	2.494E-06	9.303E-07	6.059E-07	3.828E-07	2.156E-07	1.435E-07	1.041E-07	7.987E-08	6.378E-08	5.249E-08	4.423E-08
ENE	1.460E-06	5.551E-07	3.681E-07	2.502E-07	1.618E-07	1.171E-07	8.964E-08	7.137E-08	5.857E-08	4.924E-08	4.220E-08
E	1.175E-06	4.426E-07	2.802E-07	1.861E-07	1.205E-07	8.803E-08	6.808E-08	5.477E-08	4.539E-08	3.849E-08	3.325E-08
ESE	1.316E-06	4.657E-07	2.831E-07	1.858E-07	1.214E-07	8.998E-08	7.047E-08	5.729E-08	4.790E-08	4.094E-08	3.561E-08
SE	1.150E-06	4.043E-07	2.461E-07	1.632E-07	1.074E-07	7.915E-08	6.141E-08	4.943E-08	4.094E-08	3.468E-08	2.992E-08
SSE	1.254E-06	4.410E-07	2.751E-07	1.769E-07	1.067E-07	7.446E-08	5.572E-08	4.371E-08	3.549E-08	2.960E-08	2.521E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.780E-08	1.090E-08	7.846E-09	5.142E-09	3.810E-09	3.023E-09	2.503E-09	2.121E-09	1.813E-09	1.568E-09	1.371E-09
SSW	1.571E-08	9.211E-09	6.405E-09	3.976E-09	2.823E-09	2.161E-09	1.736E-09	1.441E-09	1.218E-09	1.043E-09	9.029E-10
SW	1.629E-08	8.930E-09	5.937E-09	3.465E-09	2.355E-09	1.742E-09	1.360E-09	1.099E-09	9.086E-10	7.646E-10	6.524E-10
WSW	1.298E-08	7.074E-09	4.704E-09	2.758E-09	1.875E-09	1.368E-09	1.047E-09	8.300E-10	6.759E-10	5.626E-10	4.766E-10
W	1.332E-08	7.616E-09	5.254E-09	3.174E-09	2.130E-09	1.535E-09	1.159E-09	9.108E-10	7.383E-10	6.128E-10	5.182E-10
WNW	1.622E-08	9.770E-09	7.053E-09	4.545E-09	3.158E-09	2.292E-09	1.740E-09	1.374E-09	1.119E-09	9.332E-10	7.923E-10
NW	1.511E-08	9.073E-09	6.532E-09	4.274E-09	3.045E-09	2.287E-09	1.779E-09	1.414E-09	1.156E-09	9.653E-10	8.211E-10
NNW	1.602E-08	1.026E-08	7.686E-09	5.156E-09	3.639E-09	2.681E-09	2.044E-09	1.618E-09	1.320E-09	1.101E-09	9.358E-10
N	2.199E-08	1.395E-08	1.032E-08	6.896E-09	4.903E-09	3.658E-09	2.830E-09	2.243E-09	1.826E-09	1.521E-09	1.289E-09
NNE	3.752E-08	2.170E-08	1.502E-08	9.306E-09	6.597E-09	5.042E-09	4.044E-09	3.352E-09	2.836E-09	2.447E-09	2.138E-09
NE	3.799E-08	2.226E-08	1.553E-08	9.699E-09	6.918E-09	5.314E-09	4.281E-09	3.563E-09	3.027E-09	2.622E-09	2.301E-09
ENE	3.677E-08	2.262E-08	1.625E-08	1.055E-08	7.724E-09	6.057E-09	4.965E-09	4.195E-09	3.612E-09	3.167E-09	2.810E-09
E	2.918E-08	1.817E-08	1.315E-08	8.578E-09	6.270E-09	4.890E-09	3.977E-09	3.330E-09	2.844E-09	2.472E-09	2.174E-09
ESE	3.143E-08	2.018E-08	1.494E-08	1.010E-08	7.586E-09	6.055E-09	5.027E-09	4.289E-09	3.719E-09	3.280E-09	2.923E-09
SE	2.621E-08	1.640E-08	1.192E-08	7.849E-09	5.800E-09	4.575E-09	3.768E-09	3.194E-09	2.757E-09	2.423E-09	2.154E-09
SSE	2.186E-08	1.370E-08	1.008E-08	6.901E-09	5.337E-09	4.384E-09	3.665E-09	3.103E-09	2.662E-09	2.301E-09	2.005E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348

MIXED BETWEEN 3.556 AND 17.780 / MIXED BETWEEN 1.550 AND 7.751 BETWEEN 2.348 AND 11.739
GROUND LEVEL ABOVE 17.780 / GROUND LEVEL ABOVE 7.751 ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.558E-07	9.504E-08	4.654E-08	2.922E-08	2.062E-08	1.108E-08	5.151E-09	3.025E-09	2.113E-09	1.568E-09
SSW	2.048E-07	8.497E-08	4.266E-08	2.642E-08	1.835E-08	9.409E-09	4.003E-09	2.167E-09	1.440E-09	1.043E-09
SW	2.765E-07	1.108E-07	5.025E-08	2.914E-08	1.938E-08	9.235E-09	3.521E-09	1.753E-09	1.101E-09	7.657E-10
WSW	2.721E-07	9.652E-08	4.075E-08	2.304E-08	1.531E-08	7.333E-09	2.798E-09	1.375E-09	8.334E-10	5.643E-10
W	3.138E-07	1.047E-07	4.295E-08	2.419E-08	1.589E-08	7.833E-09	3.172E-09	1.543E-09	9.159E-10	6.149E-10
WNW	3.387E-07	1.155E-07	4.979E-08	2.875E-08	1.922E-08	9.996E-09	4.486E-09	2.302E-09	1.382E-09	9.362E-10
NW	3.146E-07	1.024E-07	4.460E-08	2.609E-08	1.772E-08	9.286E-09	4.229E-09	2.286E-09	1.420E-09	9.683E-10
NNW	2.945E-07	9.635E-08	4.355E-08	2.633E-08	1.844E-08	1.039E-08	5.044E-09	2.682E-09	1.626E-09	1.105E-09
N	3.384E-07	1.220E-07	5.832E-08	3.606E-08	2.539E-08	1.412E-08	6.770E-09	3.659E-09	2.252E-09	1.526E-09
NNE	6.894E-07	2.258E-07	9.983E-08	6.150E-08	4.370E-08	2.225E-08	9.373E-09	5.058E-09	3.353E-09	2.448E-09
NE	5.789E-07	2.207E-07	1.049E-07	6.408E-08	4.437E-08	2.276E-08	9.758E-09	5.328E-09	3.564E-09	2.623E-09
ENE	3.573E-07	1.616E-07	8.967E-08	5.867E-08	4.227E-08	2.294E-08	1.056E-08	6.064E-09	4.193E-09	3.167E-09
E	2.745E-07	1.207E-07	6.808E-08	4.544E-08	3.330E-08	1.839E-08	8.568E-09	4.893E-09	3.329E-09	2.472E-09
ESE	2.804E-07	1.218E-07	7.040E-08	4.793E-08	3.564E-08	2.035E-08	1.006E-08	6.052E-09	4.283E-09	3.278E-09
SE	2.444E-07	1.072E-07	6.135E-08	4.098E-08	2.996E-08	1.659E-08	7.842E-09	4.579E-09	3.191E-09	2.422E-09
SSE	2.683E-07	1.080E-07	5.591E-08	3.560E-08	2.527E-08	1.390E-08	6.911E-09	4.350E-09	3.095E-09	2.298E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.752E-08	8.998E-09	5.606E-09	3.040E-09	1.238E-09	6.640E-10	4.120E-10	2.805E-10	2.033E-10	1.541E-10	1.208E-10
SSW	1.369E-08	7.172E-09	4.561E-09	2.521E-09	1.045E-09	5.684E-10	3.561E-10	2.440E-10	1.775E-10	1.349E-10	1.058E-10
SW	1.909E-08	1.033E-08	6.667E-09	3.696E-09	1.539E-09	8.311E-10	5.176E-10	3.532E-10	2.563E-10	1.944E-10	1.525E-10
WSW	2.441E-08	1.254E-08	7.600E-09	4.023E-09	1.605E-09	8.466E-10	5.192E-10	3.508E-10	2.530E-10	1.912E-10	1.530E-10
W	3.074E-08	1.474E-08	8.606E-09	4.607E-09	1.812E-09	9.411E-10	5.710E-10	3.828E-10	2.746E-10	2.067E-10	1.615E-10
WNW	3.163E-08	1.607E-08	9.426E-09	5.086E-09	1.977E-09	1.027E-09	6.239E-10	4.189E-10	3.009E-10	2.270E-10	1.775E-10
NW	2.834E-08	1.493E-08	8.824E-09	4.762E-09	1.831E-09	9.489E-10	5.762E-10	3.868E-10	2.780E-10	2.097E-10	1.642E-10
NNW	2.400E-08	1.217E-08	7.088E-09	3.622E-09	1.370E-09	7.153E-10	4.373E-10	2.953E-10	2.132E-10	1.614E-10	1.266E-10
N	2.232E-08	1.118E-08	6.746E-09	3.545E-09	1.381E-09	7.297E-10	4.492E-10	3.045E-10	2.202E-10	1.668E-10	1.308E-10
NNE	5.180E-08	2.449E-08	1.436E-08	7.455E-09	2.922E-09	1.530E-09	9.348E-10	6.299E-10	4.534E-10	3.421E-10	2.676E-10
NE	4.771E-08	2.419E-08	1.498E-08	8.114E-09	3.326E-09	1.778E-09	1.100E-09	7.475E-10	5.407E-10	4.093E-10	3.206E-10
ENE	2.867E-08	1.555E-08	9.771E-09	5.380E-09	2.223E-09	1.215E-09	7.646E-10	5.257E-10	3.835E-10	2.919E-10	2.294E-10
E	2.390E-08	1.327E-08	8.309E-09	4.517E-09	1.826E-09	9.904E-10	6.208E-10	4.260E-10	3.105E-10	2.363E-10	1.859E-10
ESE	2.557E-08	1.409E-08	8.727E-09	4.693E-09	1.872E-09	1.009E-09	6.298E-10	4.311E-10	3.138E-10	2.387E-10	1.877E-10
SE	2.168E-08	1.199E-08	7.423E-09	3.997E-09	1.596E-09	8.629E-10	5.401E-10	3.704E-10	2.699E-10	2.055E-10	1.617E-10
SSE	2.108E-08	1.121E-08	6.939E-09	3.760E-09	1.524E-09	8.255E-10	5.166E-10	3.539E-10	2.576E-10	1.959E-10	1.539E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.726E-11	4.493E-11	2.715E-11	1.419E-11	9.037E-12	6.607E-12	6.134E-12	7.629E-12	7.283E-12	6.151E-12	5.001E-12

SSW	8.524E-11	3.952E-11	2.391E-11	1.251E-11	7.929E-12	5.684E-12	4.484E-12	4.050E-12	4.494E-12	4.430E-12	4.004E-12
SW	1.227E-10	5.660E-11	3.454E-11	1.765E-11	1.113E-11	7.951E-12	6.223E-12	5.695E-12	5.721E-12	4.887E-12	4.211E-12
WSW	1.231E-10	5.613E-11	3.370E-11	1.898E-11	1.432E-11	1.245E-11	9.353E-12	7.159E-12	5.546E-12	4.393E-12	3.607E-12
W	1.298E-10	5.943E-11	3.934E-11	3.048E-11	1.957E-11	1.324E-11	9.717E-12	7.298E-12	5.686E-12	4.543E-12	3.708E-12
WNW	1.429E-10	6.657E-11	5.132E-11	3.760E-11	2.329E-11	1.603E-11	1.157E-11	8.711E-12	6.774E-12	5.412E-12	4.420E-12
NW	1.322E-10	6.092E-11	4.005E-11	3.535E-11	2.408E-11	1.578E-11	1.101E-11	8.302E-12	6.445E-12	5.151E-12	4.205E-12
NNW	1.051E-10	4.843E-11	3.907E-11	3.534E-11	2.160E-11	1.403E-11	1.013E-11	7.630E-12	5.935E-12	4.743E-12	3.872E-12
N	1.054E-10	4.990E-11	3.141E-11	3.881E-11	2.828E-11	1.727E-11	1.202E-11	9.071E-12	7.051E-12	5.652E-12	4.615E-12
NNE	2.152E-10	9.890E-11	6.029E-11	3.139E-11	2.003E-11	1.437E-11	1.124E-11	9.116E-12	8.075E-12	8.000E-12	6.854E-12
NE	2.579E-10	1.184E-10	7.125E-11	3.688E-11	2.341E-11	1.662E-11	1.269E-11	1.019E-11	8.470E-12	7.325E-12	6.564E-12
ENE	1.850E-10	8.626E-11	5.250E-11	2.764E-11	1.775E-11	1.276E-11	9.867E-12	7.995E-12	6.717E-12	5.768E-12	5.091E-12
E	1.500E-10	7.029E-11	4.297E-11	2.279E-11	1.461E-11	1.069E-11	8.310E-12	6.720E-12	5.607E-12	4.765E-12	4.130E-12
ESE	1.515E-10	7.102E-11	4.348E-11	2.314E-11	1.489E-11	1.098E-11	8.621E-12	7.060E-12	6.025E-12	5.199E-12	4.554E-12
SE	1.305E-10	6.132E-11	3.761E-11	2.006E-11	1.291E-11	9.527E-12	7.388E-12	6.030E-12	5.100E-12	4.386E-12	3.852E-12
SSE	1.241E-10	5.791E-11	3.587E-11	1.876E-11	1.246E-11	1.458E-11	1.496E-11	1.161E-11	9.004E-12	6.837E-12	5.266E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Reactor Bldg/Fuel Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.219E-09	1.383E-09	4.266E-10	2.066E-10	1.219E-10	4.866E-11	1.478E-11	7.065E-12	7.070E-12	6.060E-12
SSW	4.235E-09	1.161E-09	3.679E-10	1.802E-10	1.068E-10	4.274E-11	1.301E-11	5.803E-12	4.343E-12	4.291E-12
SW	6.160E-09	1.704E-09	5.355E-10	2.604E-10	1.539E-10	6.149E-11	1.851E-11	8.109E-12	5.856E-12	4.883E-12
WSW	7.108E-09	1.805E-09	5.391E-10	2.574E-10	1.532E-10	6.104E-11	2.018E-11	1.171E-11	7.171E-12	4.444E-12
W	8.192E-09	2.046E-09	5.944E-10	2.796E-10	1.631E-10	6.613E-11	2.760E-11	1.352E-11	7.375E-12	4.572E-12
WNW	8.974E-09	2.245E-09	6.493E-10	3.065E-10	1.793E-10	7.675E-11	3.429E-11	1.618E-11	8.790E-12	5.448E-12
NW	8.375E-09	2.090E-09	5.998E-10	2.831E-10	1.659E-10	6.749E-11	3.139E-11	1.608E-11	8.368E-12	5.184E-12
NNW	6.677E-09	1.580E-09	4.547E-10	2.169E-10	1.290E-10	5.686E-11	3.006E-11	1.449E-11	7.700E-12	4.774E-12
N	6.308E-09	1.572E-09	4.661E-10	2.239E-10	1.321E-10	5.402E-11	3.249E-11	1.810E-11	9.144E-12	5.683E-12
NNE	1.354E-08	3.311E-09	9.715E-10	4.614E-10	2.703E-10	1.076E-10	3.276E-11	1.463E-11	9.325E-12	7.598E-12
NE	1.398E-08	3.702E-09	1.140E-09	5.497E-10	3.236E-10	1.285E-10	3.853E-11	1.686E-11	1.025E-11	7.382E-12
ENE	9.104E-09	2.476E-09	7.891E-10	3.892E-10	2.315E-10	9.320E-11	2.877E-11	1.293E-11	8.043E-12	5.798E-12
E	7.726E-09	2.053E-09	6.414E-10	3.152E-10	1.875E-10	7.586E-11	2.364E-11	1.078E-11	6.751E-12	4.779E-12
ESE	8.126E-09	2.115E-09	6.514E-10	3.187E-10	1.894E-10	7.666E-11	2.399E-11	1.108E-11	7.112E-12	5.205E-12
SE	6.915E-09	1.804E-09	5.583E-10	2.741E-10	1.631E-10	6.616E-11	2.078E-11	9.573E-12	6.064E-12	4.400E-12
SSE	6.476E-09	1.711E-09	5.339E-10	2.616E-10	1.553E-10	6.283E-11	1.976E-11	1.416E-11	1.157E-11	6.897E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

0Fermi COL B (with Staff JFD)

0Reactor Bldg/Fuel Bldg Stack

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 CORRECTED USING STANDARD OPEN TERRAIN FACTORS
 SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF  DIRECTION DIST.  X/Q       X/Q       X/Q       D/Q
  ID    LOCATION FROM SITE (MI) (SEC/M3)  (SEC/M3)  (SEC/M3) (PER SQ.METER)
                 NO DECAY
+                              2.260 DAY DECAY
+                                          8.000 DAY DECAY
                 UNDEPLETED      UNDEPLETED        DEPLETED
     Meat  Cow    NNW   3.05   3.5E-08   3.5E-08   3.2E-08   2.9E-10
     Meat  Cow    NNE   4.50   4.8E-08   4.8E-08   4.4E-08   2.7E-10
     Milk Cow     WNW   2.18   6.6E-08   6.6E-08   6.1E-08   8.4E-10
     Milk Cow      NW   3.65   2.7E-08   2.7E-08   2.4E-08   2.5E-10

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   52.62                REP. WIND HEIGHT       (METERS)       52.6
     DIAMETER        (METERS)    2.40                BUILDING HEIGHT        (METERS)       48.0
     EXIT VELOCITY   (METERS)   17.78                BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                     HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                          /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)    /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556           /      ELEVATED        LESS THAN  1.550              LESS THAN  2.348
     MIXED           BETWEEN    3.556 AND 17.780 /     MIXED           BETWEEN    1.550 AND  7.751   BETWEEN    2.348 AND 11.739
     GROUND LEVEL    ABOVE     17.780           /      GROUND LEVEL    ABOVE      7.751              ABOVE     11.739

USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    11:11

Fermi COL B (with Staff JFD)


Turbine Bldg Stack

NO DECAY,  UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)                DISTANCE IN  MILES FROM THE SITE
   SECTOR          .250      .500      .750     1.000     1.500     2.000     2.500     3.000     3.500     4.000     4.500

      S        1.546E-06 5.314E-07 3.036E-07 1.723E-07 8.825E-08 5.771E-08 4.198E-08 3.250E-08 2.622E-08 2.180E-08 1.854E-08
    SSW        1.095E-06 3.900E-07 2.325E-07 1.380E-07 7.495E-08 5.035E-08 3.704E-08 2.877E-08 2.320E-08 1.924E-08 1.632E-08
     SW        1.311E-06 4.749E-07 2.882E-07 1.755E-07 9.531E-08 6.233E-08 4.460E-08 3.381E-08 2.671E-08 2.177E-08 1.818E-08
    WSW        1.345E-06 4.859E-07 2.846E-07 1.656E-07 8.432E-08 5.305E-08 3.707E-08 2.767E-08 2.163E-08 1.750E-08 1.469E-08
      W        1.871E-06 6.230E-07 3.526E-07 1.994E-07 9.692E-08 5.959E-08 4.112E-08 3.048E-08 2.372E-08 1.914E-08 1.587E-08
    WNW        2.120E-06 6.822E-07 3.727E-07 2.106E-07 1.050E-07 6.595E-08 4.621E-08 3.464E-08 2.721E-08 2.212E-08 1.846E-08
     NW        2.133E-06 6.699E-07 3.510E-07 1.934E-07 9.532E-08 5.984E-08 4.204E-08 3.163E-08 2.493E-08 2.034E-08 1.710E-08
    NNW        2.027E-06 6.454E-07 3.430E-07 1.872E-07 9.095E-08 5.717E-08 4.044E-08 3.068E-08 2.440E-08 2.006E-08 1.709E-08
      N        2.204E-06 7.263E-07 4.031E-07 2.256E-07 1.130E-07 7.268E-08 5.228E-08 4.015E-08 3.221E-08 2.667E-08 2.274E-08
    NNE        4.433E-06 1.486E-06 8.350E-07 4.570E-07 2.176E-07 1.350E-07 9.482E-08 7.158E-08 5.784E-08 4.833E-08 4.081E-08
     NE        3.072E-06 1.107E-06 6.550E-07 3.785E-07 1.966E-07 1.282E-07 9.258E-08 7.109E-08 5.693E-08 4.701E-08 3.975E-08
    ENE        1.790E-06 6.584E-07 3.907E-07 2.345E-07 1.356E-07 9.576E-08 7.309E-08 5.838E-08 4.814E-08 4.067E-08 3.503E-08
      E        1.354E-06 5.036E-07 2.909E-07 1.726E-07 1.004E-07 7.148E-08 5.502E-08 4.432E-08 3.682E-08 3.132E-08 2.714E-08
    ESE        1.543E-06 5.458E-07 3.049E-07 1.775E-07 1.020E-07 7.270E-08 5.627E-08 4.560E-08 3.811E-08 3.259E-08 2.838E-08
     SE        1.364E-06 4.811E-07 2.698E-07 1.575E-07 9.076E-08 6.455E-08 4.969E-08 4.001E-08 3.323E-08 2.824E-08 2.445E-08
    SSE        1.574E-06 5.452E-07 3.114E-07 1.798E-07 9.715E-08 6.568E-08 4.874E-08 3.818E-08 3.105E-08 2.595E-08 2.216E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)                DISTANCE IN  MILES FROM THE SITE
   SECTOR          5.000     7.500    10.000    15.000    20.000    25.000    30.000    35.000    40.000    45.000    50.000

      S        1.607E-08 9.863E-09 7.131E-09 4.710E-09 3.515E-09 2.807E-09 2.343E-09 2.015E-09 1.772E-09 1.583E-09 1.432E-09
    SSW        1.409E-08 8.416E-09 5.937E-09 3.764E-09 2.715E-09 2.105E-09 1.711E-09 1.436E-09 1.235E-09 1.082E-09 9.613E-10
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SW	1.549E-08	8.767E-09	5.963E-09	3.597E-09	2.506E-09	1.891E-09	1.502E-09	1.237E-09	1.046E-09	9.018E-10	7.902E-10
WSW	1.259E-08	7.073E-09	4.809E-09	2.916E-09	2.046E-09	1.554E-09	1.242E-09	1.028E-09	8.719E-10	7.538E-10	6.612E-10
W	1.346E-08	7.795E-09	5.439E-09	3.440E-09	2.483E-09	1.909E-09	1.515E-09	1.234E-09	1.033E-09	8.831E-10	7.681E-10
WNW	1.574E-08	9.469E-09	6.834E-09	4.612E-09	3.501E-09	2.748E-09	2.180E-09	1.783E-09	1.499E-09	1.287E-09	1.123E-09
NW	1.469E-08	8.797E-09	6.323E-09	4.229E-09	3.222E-09	2.609E-09	2.171E-09	1.824E-09	1.544E-09	1.329E-09	1.163E-09
NNW	1.486E-08	9.406E-09	7.046E-09	4.964E-09	3.853E-09	3.087E-09	2.488E-09	2.043E-09	1.720E-09	1.478E-09	1.292E-09
N	1.976E-08	1.253E-08	9.316E-09	6.421E-09	4.916E-09	3.960E-09	3.269E-09	2.728E-09	2.299E-09	1.971E-09	1.718E-09
NNE	3.518E-08	2.055E-08	1.438E-08	9.070E-09	6.523E-09	5.046E-09	4.091E-09	3.426E-09	2.939E-09	2.569E-09	2.278E-09
NE	3.427E-08	2.035E-08	1.435E-08	9.124E-09	6.598E-09	5.126E-09	4.171E-09	3.505E-09	3.017E-09	2.645E-09	2.353E-09
ENE	3.066E-08	1.916E-08	1.393E-08	9.188E-09	6.809E-09	5.391E-09	4.458E-09	3.800E-09	3.313E-09	2.939E-09	2.643E-09
E	2.389E-08	1.506E-08	1.100E-08	7.294E-09	5.406E-09	4.267E-09	3.509E-09	2.971E-09	2.569E-09	2.259E-09	2.013E-09
ESE	2.509E-08	1.618E-08	1.203E-08	8.195E-09	6.205E-09	4.990E-09	4.173E-09	3.588E-09	3.148E-09	2.807E-09	2.534E-09
SE	2.150E-08	1.362E-08	9.988E-09	6.669E-09	4.981E-09	3.965E-09	3.292E-09	2.814E-09	2.459E-09	2.185E-09	1.968E-09
SSE	1.926E-08	1.207E-08	8.868E-09	6.049E-09	4.672E-09	3.868E-09	3.341E-09	2.964E-09	2.672E-09	2.432E-09	2.223E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.959E-07	9.336E-08	4.238E-08	2.633E-08	1.859E-08	1.003E-08	4.717E-09	2.810E-09	2.016E-09	1.583E-09
SSW	2.255E-07	7.802E-08	3.728E-08	2.328E-08	1.636E-08	8.575E-09	3.781E-09	2.110E-09	1.438E-09	1.083E-09
SW	2.796E-07	9.848E-08	4.501E-08	2.686E-08	1.825E-08	9.015E-09	3.638E-09	1.900E-09	1.240E-09	9.030E-10
WSW	2.764E-07	8.848E-08	3.757E-08	2.178E-08	1.475E-08	7.293E-09	2.950E-09	1.560E-09	1.030E-09	7.545E-10
W	3.446E-07	1.031E-07	4.179E-08	2.391E-08	1.595E-08	8.007E-09	3.459E-09	1.904E-09	1.238E-09	8.848E-10
WNW	3.694E-07	1.111E-07	4.685E-08	2.739E-08	1.854E-08	9.692E-09	4.612E-09	2.722E-09	1.788E-09	1.289E-09
NW	3.518E-07	1.013E-07	4.262E-08	2.510E-08	1.717E-08	9.006E-09	4.247E-09	2.597E-09	1.817E-09	1.331E-09
NNW	3.409E-07	9.732E-08	4.100E-08	2.454E-08	1.715E-08	9.569E-09	4.933E-09	3.052E-09	2.047E-09	1.481E-09
N	3.960E-07	1.201E-07	5.286E-08	3.237E-08	2.280E-08	1.271E-08	6.396E-09	3.939E-09	2.719E-09	1.975E-09
NNE	8.117E-07	2.341E-07	9.624E-08	5.814E-08	4.095E-08	2.106E-08	9.119E-09	5.058E-09	3.431E-09	2.571E-09
NE	6.326E-07	2.066E-07	9.347E-08	5.720E-08	3.987E-08	2.078E-08	9.163E-09	5.136E-09	3.509E-09	2.647E-09
ENE	3.808E-07	1.399E-07	7.325E-08	4.822E-08	3.508E-08	1.939E-08	9.183E-09	5.396E-09	3.802E-09	2.940E-09
E	2.856E-07	1.036E-07	5.513E-08	3.687E-08	2.718E-08	1.522E-08	7.279E-09	4.268E-09	2.972E-09	2.260E-09
ESE	3.018E-07	1.057E-07	5.638E-08	3.815E-08	2.841E-08	1.632E-08	8.163E-09	4.987E-09	3.588E-09	2.807E-09
SE	2.668E-07	9.393E-08	4.978E-08	3.327E-08	2.448E-08	1.376E-08	6.656E-09	3.967E-09	2.815E-09	2.186E-09
SSE	3.049E-07	1.015E-07	4.903E-08	3.115E-08	2.221E-08	1.225E-08	6.064E-09	3.872E-09	2.961E-09	2.426E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.277E+01	9.279E+01	9.279E+01	9.279E+01	9.279E+01	8.974E+01	8.171E+01	7.219E+01	6.240E+01	5.254E+01
SSW	9.208E+01	9.170E+01	9.170E+01	9.170E+01	9.170E+01	8.933E+01	8.307E+01	7.565E+01	6.803E+01	6.034E+01
SW	8.975E+01	8.901E+01	8.901E+01	8.901E+01	8.901E+01	8.676E+01	8.086E+01	7.385E+01	6.666E+01	5.940E+01

WSW	8.724E+01	8.632E+01	8.632E+01	8.632E+01	8.471E+01	7.927E+01	6.858E+01	5.590E+01	4.288E+01	2.975E+01
W	8.016E+01	7.884E+01	7.884E+01	7.884E+01	7.884E+01	6.936E+01	4.436E+01	1.560E+01	1.445E+00	3.609E-01
WNW	8.341E+01	8.187E+01	8.187E+01	8.187E+01	8.187E+01	7.070E+01	4.125E+01	1.062E+01	5.853E-01	2.655E-01
NW	8.594E+01	8.459E+01	8.459E+01	8.459E+01	8.405E+01	7.594E+01	5.578E+01	3.185E+01	9.599E+00	9.254E-01
NNW	8.742E+01	8.647E+01	8.647E+01	8.647E+01	8.540E+01	7.419E+01	4.709E+01	1.628E+01	1.765E+00	6.678E-01
N	8.803E+01	8.728E+01	8.728E+01	8.728E+01	8.675E+01	7.793E+01	5.590E+01	2.977E+01	7.780E+00	1.271E+00
NNE	8.784E+01	8.785E+01	8.785E+01	8.569E+01	8.338E+01	8.179E+01	7.879E+01	7.523E+01	7.158E+01	6.790E+01
NE	9.028E+01	9.030E+01	9.030E+01	9.030E+01	9.030E+01	8.881E+01	8.490E+01	8.026E+01	7.550E+01	7.070E+01
ENE	9.573E+01	9.576E+01	9.576E+01	9.576E+01	9.576E+01	9.427E+01	9.034E+01	8.568E+01	8.089E+01	7.606E+01
E	9.858E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01	9.864E+01
ESE	9.731E+01	9.735E+01	9.735E+01	9.735E+01	9.735E+01	9.688E+01	9.563E+01	9.414E+01	9.262E+01	9.108E+01
SE	9.714E+01	9.717E+01	9.717E+01	9.717E+01	9.717E+01	9.622E+01	9.372E+01	9.075E+01	8.770E+01	8.463E+01
SSE	9.472E+01	9.475E+01	9.475E+01	9.475E+01	9.475E+01	9.014E+01	7.800E+01	6.359E+01	4.880E+01	3.389E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.545E-06	5.309E-07	3.032E-07	1.720E-07	8.800E-08	5.749E-08	4.178E-08	3.230E-08	2.603E-08	2.162E-08	1.837E-08
SSW	1.094E-06	3.896E-07	2.322E-07	1.377E-07	7.475E-08	5.017E-08	3.687E-08	2.861E-08	2.305E-08	1.910E-08	1.618E-08
SW	1.310E-06	4.744E-07	2.878E-07	1.752E-07	9.508E-08	6.213E-08	4.442E-08	3.364E-08	2.655E-08	2.162E-08	1.804E-08
WSW	1.344E-06	4.854E-07	2.842E-07	1.653E-07	8.410E-08	5.287E-08	3.691E-08	2.753E-08	2.150E-08	1.737E-08	1.457E-08
W	1.871E-06	6.226E-07	3.522E-07	1.992E-07	9.672E-08	5.943E-08	4.098E-08	3.035E-08	2.361E-08	1.903E-08	1.577E-08
WNW	2.119E-06	6.816E-07	3.722E-07	2.103E-07	1.048E-07	6.575E-08	4.602E-08	3.448E-08	2.706E-08	2.198E-08	1.833E-08
NW	2.132E-06	6.693E-07	3.505E-07	1.930E-07	9.508E-08	5.964E-08	4.186E-08	3.147E-08	2.479E-08	2.021E-08	1.698E-08
NNW	2.026E-06	6.448E-07	3.425E-07	1.868E-07	9.070E-08	5.697E-08	4.026E-08	3.052E-08	2.424E-08	1.992E-08	1.695E-08
N	2.203E-06	7.256E-07	4.025E-07	2.252E-07	1.127E-07	7.242E-08	5.204E-08	3.993E-08	3.200E-08	2.647E-08	2.255E-08
NNE	4.431E-06	1.485E-06	8.340E-07	4.562E-07	2.171E-07	1.346E-07	9.444E-08	7.123E-08	5.751E-08	4.801E-08	4.050E-08
NE	3.071E-06	1.106E-06	6.542E-07	3.779E-07	1.961E-07	1.278E-07	9.219E-08	7.073E-08	5.658E-08	4.668E-08	3.943E-08
ENE	1.789E-06	6.578E-07	3.901E-07	2.340E-07	1.352E-07	9.538E-08	7.272E-08	5.801E-08	4.777E-08	4.031E-08	3.467E-08
E	1.353E-06	5.030E-07	2.903E-07	1.722E-07	1.001E-07	7.115E-08	5.470E-08	4.399E-08	3.649E-08	3.099E-08	2.681E-08
ESE	1.542E-06	5.451E-07	3.044E-07	1.771E-07	1.016E-07	7.237E-08	5.594E-08	4.526E-08	3.777E-08	3.225E-08	2.804E-08
SE	1.363E-06	4.806E-07	2.694E-07	1.571E-07	9.047E-08	6.427E-08	4.942E-08	3.973E-08	3.295E-08	2.797E-08	2.418E-08
SSE	1.573E-06	5.446E-07	3.109E-07	1.795E-07	9.687E-08	6.543E-08	4.849E-08	3.795E-08	3.082E-08	2.573E-08	2.195E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.590E-08	9.699E-09	6.968E-09	4.543E-09	3.345E-09	2.637E-09	2.172E-09	1.844E-09	1.601E-09	1.412E-09	1.261E-09
SSW	1.395E-08	8.286E-09	5.811E-09	3.640E-09	2.592E-09	1.984E-09	1.592E-09	1.319E-09	1.120E-09	9.690E-10	8.504E-10
SW	1.536E-08	8.647E-09	5.851E-09	3.491E-09	2.405E-09	1.793E-09	1.408E-09	1.146E-09	9.574E-10	8.163E-10	7.072E-10
WSW	1.247E-08	6.973E-09	4.715E-09	2.827E-09	1.961E-09	1.472E-09	1.163E-09	9.512E-10	7.978E-10	6.819E-10	5.913E-10
W	1.336E-08	7.706E-09	5.354E-09	3.356E-09	2.401E-09	1.829E-09	1.438E-09	1.161E-09	9.636E-10	8.172E-10	7.049E-10
WNW	1.561E-08	9.352E-09	6.719E-09	4.491E-09	3.373E-09	2.620E-09	2.057E-09	1.666E-09	1.387E-09	1.180E-09	1.020E-09
NW	1.456E-08	8.683E-09	6.213E-09	4.116E-09	3.106E-09	2.491E-09	2.053E-09	1.708E-09	1.432E-09	1.221E-09	1.058E-09
NNW	1.472E-08	9.268E-09	6.905E-09	4.807E-09	3.687E-09	2.919E-09	2.324E-09	1.886E-09	1.571E-09	1.336E-09	1.155E-09
N	1.957E-08	1.233E-08	9.113E-09	6.198E-09	4.679E-09	3.715E-09	3.023E-09	2.487E-09	2.067E-09	1.751E-09	1.507E-09
NNE	3.488E-08	2.028E-08	1.412E-08	8.812E-09	6.271E-09	4.799E-09	3.849E-09	3.190E-09	2.708E-09	2.341E-09	2.055E-09
NE	3.396E-08	2.005E-08	1.406E-08	8.825E-09	6.301E-09	4.831E-09	3.880E-09	3.218E-09	2.734E-09	2.366E-09	2.077E-09
ENE	3.030E-08	1.880E-08	1.356E-08	8.807E-09	6.422E-09	5.003E-09	4.069E-09	3.413E-09	2.928E-09	2.556E-09	2.263E-09
E	2.356E-08	1.473E-08	1.066E-08	6.937E-09	5.044E-09	3.906E-09	3.152E-09	2.618E-09	2.223E-09	1.919E-09	1.679E-09
ESE	2.475E-08	1.583E-08	1.167E-08	7.803E-09	5.802E-09	4.581E-09	3.763E-09	3.178E-09	2.740E-09	2.401E-09	2.131E-09

SE	2.123E-08	1.335E-08	9.708E-09	6.375E-09	4.681E-09	3.664E-09	2.990E-09	2.514E-09	2.160E-09	1.888E-09	1.673E-09
SSE	1.905E-08	1.186E-08	8.656E-09	5.819E-09	4.428E-09	3.610E-09	3.070E-09	2.681E-09	2.379E-09	2.131E-09	1.917E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.332	LESS THAN	2.176
MIXED	BETWEEN	1.332 AND 6.659	BETWEEN	2.176 AND 10.881
GROUND LEVEL	ABOVE	6.659	ABOVE	10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.955E-07	9.310E-08	4.218E-08	2.614E-08	1.842E-08	9.863E-09	4.549E-09	2.639E-09	1.845E-09	1.412E-09
SSW	2.252E-07	7.781E-08	3.711E-08	2.313E-08	1.622E-08	8.445E-09	3.657E-09	1.990E-09	1.321E-09	9.699E-10
SW	2.792E-07	9.825E-08	4.483E-08	2.670E-08	1.811E-08	8.895E-09	3.532E-09	1.802E-09	1.149E-09	8.177E-10
WSW	2.761E-07	8.826E-08	3.741E-08	2.165E-08	1.463E-08	7.192E-09	2.861E-09	1.479E-09	9.532E-10	6.827E-10
W	3.443E-07	1.029E-07	4.165E-08	2.379E-08	1.584E-08	7.917E-09	3.376E-09	1.825E-09	1.165E-09	8.190E-10
WNW	3.690E-07	1.109E-07	4.666E-08	2.724E-08	1.840E-08	9.573E-09	4.489E-09	2.595E-09	1.671E-09	1.182E-09
NW	3.514E-07	1.011E-07	4.245E-08	2.495E-08	1.704E-08	8.892E-09	4.133E-09	2.480E-09	1.701E-09	1.223E-09
NNW	3.405E-07	9.707E-08	4.082E-08	2.439E-08	1.700E-08	9.429E-09	4.776E-09	2.886E-09	1.891E-09	1.338E-09
N	3.955E-07	1.198E-07	5.263E-08	3.216E-08	2.261E-08	1.251E-08	6.171E-09	3.695E-09	2.480E-09	1.754E-09
NNE	8.107E-07	2.336E-07	9.587E-08	5.781E-08	4.064E-08	2.079E-08	8.863E-09	4.812E-09	3.194E-09	2.344E-09
NE	6.318E-07	2.061E-07	9.309E-08	5.685E-08	3.955E-08	2.048E-08	8.866E-09	4.842E-09	3.223E-09	2.368E-09
ENE	3.802E-07	1.395E-07	7.288E-08	4.785E-08	3.472E-08	1.903E-08	8.803E-09	5.008E-09	3.416E-09	2.558E-09
E	2.851E-07	1.033E-07	5.480E-08	3.654E-08	2.685E-08	1.488E-08	6.924E-09	3.908E-09	2.620E-09	1.920E-09
ESE	3.013E-07	1.054E-07	5.605E-08	3.781E-08	2.807E-08	1.596E-08	7.772E-09	4.579E-09	3.178E-09	2.401E-09
SE	2.664E-07	9.364E-08	4.950E-08	3.299E-08	2.421E-08	1.348E-08	6.363E-09	3.666E-09	2.515E-09	1.889E-09
SSE	3.044E-07	1.012E-07	4.879E-08	3.092E-08	2.200E-08	1.204E-08	5.831E-09	3.612E-09	2.677E-09	2.125E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.472E-06	4.916E-07	2.761E-07	1.560E-07	7.997E-08	5.230E-08	3.800E-08	2.935E-08	2.362E-08	1.958E-08	1.661E-08
SSW	1.043E-06	3.613E-07	2.123E-07	1.260E-07	6.880E-08	4.630E-08	3.402E-08	2.636E-08	2.120E-08	1.753E-08	1.481E-08
SW	1.252E-06	4.409E-07	2.642E-07	1.614E-07	8.803E-08	5.750E-08	4.099E-08	3.092E-08	2.430E-08	1.970E-08	1.637E-08
WSW	1.287E-06	4.527E-07	2.612E-07	1.518E-07	7.724E-08	4.842E-08	3.366E-08	2.499E-08	1.942E-08	1.562E-08	1.306E-08
W	1.787E-06	5.768E-07	3.207E-07	1.806E-07	8.731E-08	5.338E-08	3.661E-08	2.696E-08	2.085E-08	1.672E-08	1.379E-08
WNW	2.032E-06	6.353E-07	3.403E-07	1.916E-07	9.526E-08	5.956E-08	4.152E-08	3.096E-08	2.419E-08	1.956E-08	1.625E-08

NW	2.048E-06	6.256E-07	3.209E-07	1.757E-07	8.621E-08	5.387E-08	3.765E-08	2.817E-08	2.209E-08	1.793E-08	1.501E-08
NNW	1.940E-06	6.001E-07	3.121E-07	1.690E-07	8.165E-08	5.114E-08	3.604E-08	2.724E-08	2.157E-08	1.768E-08	1.503E-08
N	2.103E-06	6.721E-07	3.655E-07	2.033E-07	1.017E-07	6.538E-08	4.697E-08	3.600E-08	2.882E-08	2.380E-08	2.026E-08
NNE	4.219E-06	1.371E-06	7.548E-07	4.097E-07	1.939E-07	1.200E-07	8.397E-08	6.318E-08	5.100E-08	4.257E-08	3.585E-08
NE	2.926E-06	1.025E-06	5.975E-07	3.448E-07	1.796E-07	1.171E-07	8.444E-08	6.467E-08	5.163E-08	4.250E-08	3.582E-08
ENE	1.713E-06	6.153E-07	3.601E-07	2.163E-07	1.261E-07	8.936E-08	6.821E-08	5.440E-08	4.476E-08	3.773E-08	3.241E-08
E	1.302E-06	4.739E-07	2.695E-07	1.598E-07	9.365E-08	6.684E-08	5.145E-08	4.138E-08	3.432E-08	2.913E-08	2.518E-08
ESE	1.484E-06	5.130E-07	2.817E-07	1.636E-07	9.467E-08	6.775E-08	5.249E-08	4.251E-08	3.549E-08	3.030E-08	2.634E-08
SE	1.312E-06	4.521E-07	2.491E-07	1.451E-07	8.424E-08	6.014E-08	4.633E-08	3.727E-08	3.090E-08	2.622E-08	2.265E-08
SSE	1.505E-06	5.074E-07	2.850E-07	1.642E-07	8.912E-08	6.035E-08	4.474E-08	3.498E-08	2.837E-08	2.364E-08	2.013E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.435E-08	8.727E-09	6.258E-09	4.083E-09	3.018E-09	2.393E-09	1.986E-09	1.699E-09	1.480E-09	1.312E-09	1.172E-09
SSW	1.275E-08	7.520E-09	5.247E-09	3.270E-09	2.326E-09	1.782E-09	1.434E-09	1.192E-09	1.013E-09	8.779E-10	7.707E-10
SW	1.388E-08	7.695E-09	5.143E-09	3.016E-09	2.053E-09	1.519E-09	1.186E-09	9.608E-10	7.980E-10	6.774E-10	5.838E-10
WSW	1.114E-08	6.130E-09	4.094E-09	2.411E-09	1.652E-09	1.231E-09	9.636E-10	7.752E-10	6.371E-10	5.336E-10	4.538E-10
W	1.163E-08	6.622E-09	4.556E-09	2.820E-09	1.954E-09	1.433E-09	1.094E-09	8.612E-10	6.984E-10	5.798E-10	4.905E-10
WNW	1.378E-08	8.193E-09	5.857E-09	3.887E-09	2.809E-09	2.107E-09	1.611E-09	1.274E-09	1.038E-09	8.655E-10	7.351E-10
NW	1.283E-08	7.580E-09	5.388E-09	3.555E-09	2.660E-09	2.068E-09	1.650E-09	1.341E-09	1.101E-09	9.213E-10	7.845E-10
NNW	1.303E-08	8.216E-09	6.133E-09	4.293E-09	3.196E-09	2.436E-09	1.891E-09	1.500E-09	1.225E-09	1.023E-09	8.698E-10
N	1.757E-08	1.111E-08	8.229E-09	5.640E-09	4.258E-09	3.290E-09	2.599E-09	2.095E-09	1.713E-09	1.429E-09	1.213E-09
NNE	3.082E-08	1.779E-08	1.232E-08	7.633E-09	5.412E-09	4.136E-09	3.317E-09	2.750E-09	2.329E-09	2.012E-09	1.762E-09
NE	3.078E-08	1.806E-08	1.261E-08	7.886E-09	5.628E-09	4.324E-09	3.485E-09	2.902E-09	2.469E-09	2.142E-09	1.883E-09
ENE	2.830E-08	1.752E-08	1.263E-08	8.220E-09	6.025E-09	4.725E-09	3.875E-09	3.277E-09	2.827E-09	2.484E-09	2.209E-09
E	2.211E-08	1.380E-08	9.996E-09	6.528E-09	4.774E-09	3.724E-09	3.028E-09	2.537E-09	2.172E-09	1.893E-09	1.669E-09
ESE	2.325E-08	1.489E-08	1.099E-08	7.402E-09	5.548E-09	4.421E-09	3.667E-09	3.128E-09	2.724E-09	2.413E-09	2.161E-09
SE	1.988E-08	1.248E-08	9.084E-09	5.986E-09	4.421E-09	3.485E-09	2.868E-09	2.432E-09	2.107E-09	1.857E-09	1.656E-09
SSE	1.744E-08	1.083E-08	7.899E-09	5.334E-09	4.096E-09	3.379E-09	2.911E-09	2.567E-09	2.263E-09	2.005E-09	1.783E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.706E-07	8.458E-08	3.835E-08	2.372E-08	1.665E-08	8.879E-09	4.093E-09	2.397E-09	1.698E-09	1.310E-09
SSW	2.071E-07	7.150E-08	3.423E-08	2.127E-08	1.485E-08	7.671E-09	3.290E-09	1.788E-09	1.193E-09	8.782E-10
SW	2.578E-07	9.076E-08	4.136E-08	2.444E-08	1.643E-08	7.935E-09	3.060E-09	1.528E-09	9.632E-10	6.785E-10
WSW	2.552E-07	8.100E-08	3.413E-08	1.956E-08	1.311E-08	6.339E-09	2.448E-09	1.236E-09	7.764E-10	5.347E-10
W	3.153E-07	9.295E-08	3.722E-08	2.102E-08	1.386E-08	6.816E-09	2.821E-09	1.436E-09	8.657E-10	5.819E-10
WNW	3.398E-07	1.008E-07	4.211E-08	2.436E-08	1.632E-08	8.397E-09	3.845E-09	2.096E-09	1.280E-09	8.683E-10
NW	3.241E-07	9.172E-08	3.819E-08	2.224E-08	1.507E-08	7.773E-09	3.564E-09	2.059E-09	1.338E-09	9.239E-10
NNW	3.125E-07	8.749E-08	3.654E-08	2.171E-08	1.507E-08	8.360E-09	4.214E-09	2.420E-09	1.507E-09	1.026E-09

N	3.615E-07	1.081E-07	4.749E-08	2.896E-08	2.031E-08	1.126E-08	5.601E-09	3.272E-09	2.094E-09	1.433E-09
NNE	7.383E-07	2.090E-07	8.525E-08	5.127E-08	3.598E-08	1.826E-08	7.688E-09	4.149E-09	2.752E-09	2.013E-09
NE	5.802E-07	1.885E-07	8.525E-08	5.187E-08	3.593E-08	1.847E-08	7.932E-09	4.336E-09	2.903E-09	2.143E-09
ENE	3.529E-07	1.298E-07	6.832E-08	4.484E-08	3.246E-08	1.774E-08	8.224E-09	4.732E-09	3.276E-09	2.484E-09
E	2.662E-07	9.644E-08	5.153E-08	3.436E-08	2.521E-08	1.396E-08	6.519E-09	3.726E-09	2.538E-09	1.893E-09
ESE	2.806E-07	9.803E-08	5.257E-08	3.552E-08	2.637E-08	1.501E-08	7.376E-09	4.420E-09	3.128E-09	2.412E-09
SE	2.480E-07	8.705E-08	4.639E-08	3.094E-08	2.268E-08	1.261E-08	5.979E-09	3.488E-09	2.432E-09	1.857E-09
SSE	2.808E-07	9.303E-08	4.500E-08	2.845E-08	2.017E-08	1.100E-08	5.354E-09	3.383E-09	2.549E-09	1.999E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.620E-08	7.721E-09	4.871E-09	2.695E-09	1.093E-09	6.056E-10	3.858E-10	2.675E-10	1.961E-10	1.497E-10	1.178E-10
SSW	1.293E-08	6.324E-09	4.059E-09	2.283E-09	9.445E-10	5.276E-10	3.377E-10	2.347E-10	1.724E-10	1.317E-10	1.037E-10
SW	1.703E-08	8.355E-09	5.609E-09	3.182E-09	1.330E-09	7.452E-10	4.776E-10	3.323E-10	2.441E-10	1.865E-10	1.469E-10
WSW	2.118E-08	1.044E-08	6.743E-09	3.637E-09	1.440E-09	7.781E-10	4.871E-10	3.340E-10	2.433E-10	1.850E-10	1.492E-10
W	2.841E-08	1.375E-08	8.193E-09	4.449E-09	1.729E-09	9.096E-10	5.584E-10	3.776E-10	2.725E-10	2.060E-10	1.613E-10
WNW	2.798E-08	1.456E-08	9.279E-09	4.834E-09	1.840E-09	9.692E-10	5.966E-10	4.047E-10	2.929E-10	2.221E-10	1.744E-10
NW	2.538E-08	1.358E-08	8.458E-09	4.507E-09	1.683E-09	8.845E-10	5.442E-10	3.694E-10	2.677E-10	2.034E-10	1.600E-10
NNW	2.185E-08	1.116E-08	6.912E-09	3.600E-09	1.338E-09	7.033E-10	4.329E-10	2.939E-10	2.131E-10	1.618E-10	1.285E-10
N	2.224E-08	1.059E-08	6.558E-09	3.476E-09	1.338E-09	7.161E-10	4.460E-10	3.048E-10	2.217E-10	1.685E-10	1.324E-10
NNE	4.915E-08	2.200E-08	1.321E-08	6.971E-09	2.692E-09	1.443E-09	8.994E-10	6.150E-10	4.506E-10	3.457E-10	2.710E-10
NE	4.259E-08	1.989E-08	1.252E-08	6.954E-09	2.844E-09	1.581E-09	1.009E-09	7.004E-10	5.138E-10	3.922E-10	3.086E-10
ENE	2.485E-08	1.321E-08	8.686E-09	4.908E-09	2.013E-09	1.128E-09	7.235E-10	5.041E-10	3.710E-10	2.839E-10	2.239E-10
E	2.078E-08	1.151E-08	7.539E-09	4.193E-09	1.679E-09	9.289E-10	5.916E-10	4.104E-10	3.014E-10	2.305E-10	1.818E-10
ESE	2.236E-08	1.234E-08	8.008E-09	4.400E-09	1.736E-09	9.519E-10	6.029E-10	4.169E-10	3.056E-10	2.335E-10	1.841E-10
SE	1.916E-08	1.066E-08	6.933E-09	3.811E-09	1.503E-09	8.242E-10	5.220E-10	3.610E-10	2.646E-10	2.023E-10	1.595E-10
SSE	1.885E-08	9.811E-09	6.324E-09	3.502E-09	1.405E-09	7.766E-10	4.941E-10	3.425E-10	2.513E-10	1.920E-10	1.514E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.500E-11	4.507E-11	2.780E-11	1.473E-11	9.333E-12	6.696E-12	5.152E-12	4.147E-12	3.668E-12	3.464E-12	4.275E-12
SSW	8.359E-11	3.980E-11	2.450E-11	1.285E-11	8.132E-12	5.811E-12	4.454E-12	3.577E-12	2.971E-12	2.532E-12	2.253E-12
SW	1.184E-10	5.665E-11	3.449E-11	1.812E-11	1.143E-11	8.108E-12	6.150E-12	4.878E-12	4.004E-12	3.374E-12	2.962E-12
WSW	1.202E-10	5.695E-11	3.437E-11	1.797E-11	1.145E-11	8.216E-12	7.703E-12	7.239E-12	5.967E-12	4.837E-12	3.912E-12
W	1.298E-10	6.089E-11	3.703E-11	2.442E-11	2.023E-11	1.393E-11	9.853E-12	7.414E-12	5.776E-12	4.615E-12	3.767E-12
WNW	1.408E-10	6.781E-11	4.113E-11	3.496E-11	2.496E-11	1.633E-11	1.174E-11	8.842E-12	6.876E-12	5.496E-12	4.486E-12
NW	1.293E-10	6.214E-11	3.850E-11	2.079E-11	2.332E-11	1.746E-11	1.243E-11	8.600E-12	6.674E-12	5.332E-12	4.352E-12
NNW	1.038E-10	4.957E-11	3.063E-11	2.273E-11	2.375E-11	1.480E-11	1.030E-11	7.784E-12	6.055E-12	4.838E-12	3.949E-12
N	1.068E-10	5.145E-11	3.169E-11	1.707E-11	2.634E-11	2.013E-11	1.312E-11	9.402E-12	7.316E-12	5.865E-12	4.788E-12
NNE	2.182E-10	1.032E-10	6.289E-11	3.299E-11	2.104E-11	1.514E-11	1.169E-11	9.466E-12	7.909E-12	6.770E-12	5.927E-12
NE	2.487E-10	1.180E-10	7.238E-11	3.818E-11	2.416E-11	1.719E-11	1.312E-11	1.050E-11	8.656E-12	7.348E-12	6.352E-12
ENE	1.808E-10	8.606E-11	5.307E-11	2.822E-11	1.798E-11	1.299E-11	1.001E-11	8.133E-12	6.768E-12	5.825E-12	5.084E-12
E	1.470E-10	7.005E-11	4.333E-11	2.318E-11	1.478E-11	1.086E-11	8.348E-12	6.628E-12	5.389E-12	4.466E-12	3.757E-12
ESE	1.489E-10	7.098E-11	4.397E-11	2.356E-11	1.504E-11	1.108E-11	8.545E-12	6.801E-12	5.546E-12	4.597E-12	3.946E-12
SE	1.290E-10	6.155E-11	3.811E-11	2.044E-11	1.307E-11	9.619E-12	7.444E-12	5.959E-12	5.021E-12	4.248E-12	3.820E-12
SSE	1.222E-10	5.832E-11	3.606E-11	1.921E-11	1.236E-11	8.868E-12	7.497E-12	8.704E-12	9.337E-12	7.687E-12	6.255E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 11:11

Fermi COL B (with Staff JFD)

Turbine Bldg Stack

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******************     RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS     *****************
                                        SEGMENT BOUNDARIES IN MILES
DIRECTION .5-1     1-2       2-3       3-4       4-5       5-10      10-20     20-30     30-40     40-50
 FROM SITE
    S 4.537E-09 1.232E-09 3.971E-10 1.988E-10 1.188E-10 4.849E-11 1.524E-11 6.781E-12 4.252E-12 3.825E-12
  SSW 3.773E-09 1.057E-09 3.472E-10 1.747E-10 1.045E-10 4.273E-11 1.334E-11 5.887E-12 3.597E-12 2.559E-12
   SW 5.141E-09 1.482E-09 4.908E-10 2.474E-10 1.481E-10 6.052E-11 1.879E-11 8.210E-12 4.909E-12 3.408E-12
  WSW 6.185E-09 1.634E-09 5.035E-10 2.470E-10 1.491E-10 6.098E-11 1.872E-11 8.873E-12 6.887E-12 4.829E-12
    W 7.764E-09 1.969E-09 5.797E-10 2.772E-10 1.628E-10 6.559E-11 2.536E-11 1.398E-11 7.487E-12 4.645E-12
  WNW 8.477E-09 2.118E-09 6.192E-10 2.979E-10 1.761E-10 7.217E-11 3.188E-11 1.679E-11 8.923E-12 5.531E-12
   NW 7.840E-09 1.956E-09 5.650E-10 2.723E-10 1.615E-10 6.657E-11 2.585E-11 1.701E-11 8.961E-12 5.367E-12
  NNW 6.385E-09 1.559E-09 4.494E-10 2.166E-10 1.292E-10 5.320E-11 2.494E-11 1.539E-11 7.845E-12 4.869E-12
    N 6.085E-09 1.537E-09 4.615E-10 2.252E-10 1.336E-10 5.496E-11 2.444E-11 1.898E-11 9.669E-12 5.896E-12
  NNE 1.239E-08 3.088E-09 9.305E-10 4.576E-10 2.736E-10 1.108E-10 3.433E-11 1.533E-11 9.509E-12 6.795E-12
   NE 1.168E-08 3.196E-09 1.038E-09 5.208E-10 3.112E-10 1.268E-10 3.955E-11 1.742E-11 1.054E-11 7.366E-12
  ENE 8.013E-09 2.263E-09 7.435E-10 3.758E-10 2.257E-10 9.245E-11 2.919E-11 1.313E-11 8.150E-12 5.830E-12
    E 6.933E-09 1.904E-09 6.091E-10 3.056E-10 1.834E-10 7.527E-11 2.392E-11 1.090E-11 6.647E-12 4.477E-12
  ESE 7.366E-09 1.979E-09 6.216E-10 3.099E-10 1.857E-10 7.629E-11 2.431E-11 1.112E-11 6.821E-12 4.637E-12
   SE 6.374E-09 1.714E-09 5.382E-10 2.684E-10 1.609E-10 6.612E-11 2.109E-11 9.669E-12 6.026E-12 4.319E-12
  SSE 5.844E-09 1.592E-09 5.088E-10 2.548E-10 1.526E-10 6.263E-11 1.991E-11 9.251E-12 8.600E-12 7.646E-12

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   71.30                    REP. WIND HEIGHT       (METERS)       71.3
     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)      /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                  /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556             /      ELEVATED        LESS THAN  1.332              LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780  /      MIXED           BETWEEN    1.332 AND  6.659   BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780             /      GROUND LEVEL    ABOVE      6.659              ABOVE     10.881
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    11:11

0Fermi COL B (with Staff JFD)

0Turbine Bldg Stack
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS
 SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF  DIRECTION DIST.  X/Q       X/Q       X/Q       D/Q
  ID    LOCATION FROM SITE (MI) (SEC/M3)  (SEC/M3)  (SEC/M3) (PER SQ.METER)
                  NO DECAY
+                             2.260 DAY DECAY
+                                                 8.000 DAY DECAY
                 UNDEPLETED      UNDEPLETED        DEPLETED
     Meat  Cow    NNW   3.05   3.0E-08   3.0E-08   2.7E-08   2.8E-10
     Meat  Cow    NNE   4.50   4.1E-08   4.1E-08   3.6E-08   2.7E-10
     Milk Cow     WNW   2.18   5.7E-08   5.7E-08   5.2E-08   8.0E-10
     Milk Cow      NW   3.65   2.3E-08   2.3E-08   2.1E-08   2.5E-10

VENT AND BUILDING PARAMETERS:
     RELEASE HEIGHT  (METERS)   71.30                    REP. WIND HEIGHT       (METERS)       71.3
     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                         HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                            /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
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VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.332	LESS THAN	2.176
MIXED	BETWEEN	1.332 AND 6.659	BETWEEN	2.176 AND 10.881
GROUND LEVEL	ABOVE	6.659	ABOVE	10.881

11/23/2009

Staff's XOQDOQ Runs

- Compares applicant's original results with staff's runs using applicant's JFD from original met data
- revised receptor distances from response to RAI 02.03.05-1

Values used for demonstrating compliance with 10 CFR Part 20 site boundary concentrations

Distances

			RB/FB Vent Stack			TB Vent Stack			RWB Vent Stack		
			Applicant	Staff	Ratio	Applicant	Staff	Ratio	Applicant	Staff	Ratio
			6.3E-7			6.9E-7			1.7E-5		
Site Boundary	χ/Q	undepleted/no decay	5.0E-07	5.0E-07	1.00	5.5E-07	5.7E-07	1.04	9.3E-06	9.2E-06	0.99
		undepleted/decay	5.0E-07	5.0E-07	1.00	5.5E-07	5.7E-07	1.04	9.3E-06	9.1E-06	0.98
		depleted/decay	4.7E-07	4.7E-07	1.00	5.1E-07	5.3E-07	1.04	8.3E-06	8.3E-06	1.00
	D/Q		1.4E-08	1.4E-08	1.00	1.3E-08	1.3E-08	1.00	3.5E-08	3.9E-08	1.11
Nearest Resident	χ/Q	undepleted/no decay	3.8E-07	3.9E-07	1.03	4.0E-07	4.3E-07	1.08	4.9E-06	5.3E-06	1.08
		undepleted/decay	3.8E-07	3.9E-07	1.03	4.0E-07	4.3E-07	1.08	4.9E-06	5.2E-06	1.06
		depleted/decay	3.6E-07	3.6E-07	1.00	3.7E-07	3.9E-07	1.05	4.3E-06	4.7E-06	1.09
	D/Q		1.1E-08	1.1E-08	1.00	9.9E-09	1.0E-08	1.01	2.5E-08	2.8E-08	1.12
Nearest Meat Animal	χ/Q	undepleted/no decay	4.8E-08	4.8E-08	1.00	4.1E-08	4.1E-08	1.00	1.9E-07	2.0E-07	1.05
		undepleted/decay	4.7E-08	4.8E-08	1.02	4.1E-08	4.1E-08	1.00	1.9E-07	1.9E-07	1.00
		depleted/decay	4.3E-08	4.4E-08	1.02	3.6E-08	3.6E-08	1.00	1.4E-07	1.5E-07	1.07
	D/Q		3.0~~2.7~~E-10	3.0~~2.7~~E-10	1.00	2.9E-10	3.0E-10	1.03	6.0E-10	6.3E-10	1.05
Nearest Garden	χ/Q	undepleted/no decay	3.8E-07	3.9E-07	1.03	4.0E-07	4.2E-07	1.05	4.6E-06	5.2E-06	1.13
		undepleted/decay	3.8E-07	3.9E-07	1.03	4.0E-07	4.2E-07	1.05	4.6E-06	5.2E-06	1.13
		depleted/decay	3.6E-07	3.6E-07	1.00	3.7E-07	3.9E-07	1.05	4.1E-06	4.7E-06	1.15
	D/Q		1.1E-08	1.1E-08	1.00	9.8E-09	1.0E-08	1.02	2.5E-08	2.8E-08	1.12
Nearest Milk Cow	χ/Q	undepleted/no decay	6.7E-08	6.7E-08	1.00	5.8E-08	5.9E-08	1.02	3.0E-07	3.1E-07	1.03
		undepleted/decay	6.6E-08	6.6E-08	1.00	5.8E-08	5.9E-08	1.02	2.9E-07	3.0E-07	1.03
		depleted/decay	6.1E-08	6.1E-08	1.00	5.3E-08	5.3E-08	1.00	2.4E-07	2.5E-07	1.04
	D/Q		8.7E-10	8.7E-10	1.00	8.3E-10	8.4E-10	1.01	1.5E-09	1.6E-09	1.07
Nearest Milk Goat	χ/Q	undepleted/no decay	6.1E-08	6.1E-08	1.00	5.4E-08	5.4E-08	1.00	2.6E-07	2.7E-07	1.04
		undepleted/decay	6.1E-08	6.1E-08	1.00	5.3E-08	5.4E-08	1.02	2.6E-07	2.7E-07	1.04
		depleted/decay	5.6E-08	5.6E-08	1.00	4.8E-08	4.9E-08	1.02	2.2E-07	2.2E-07	1.00
	D/Q		7.7E-10	7.7E-10	1.00	7.4E-10	7.5E-10	1.01	1.4E-09	1.4E-09	1.00
				Max	1.03		Max	1.08		Max	1.15
				Min	1.00		Min	1.00		Min	0.98

Site Bndy

Sector	RB-CL	RB/FB-VS	Diff	RW-VS	Diff	TB-VS	Diff
N	1059	1042	-17	976	-83	1016	-43
NNE	1531	1507	-24	1413	-118	1470	-61
NE	2054	2064	10	1961	-93	1924	-130
SSE	1131	1109	-22	1191	60	1221	90
S	1131	1109	-22	1191	60	1221	90
SSW	1156	1134	-22	1218	62	1249	93
SW	1447	1413	-34	1494	47	1560	113
WSW	1281	1264	-17	1136	-145	1199	-82
W	943	911	-32	913	-30	1003	60
WNW	919	924	5	863	-56	897	-22
NW	919	903	-16	845	-74	879	-40
NNW	919	903	-16	845	-74	879	-40

2x 10-

4x 8-

5+ 71

130

Resident

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	NA	#VALUE!	#VALUE!	#VALUE!
NNE	2019	1995	1901	1958
NE	2182	2192	2089	2052
SSE	1478	1456	1538	1568
S	NA	#VALUE!	#VALUE!	#VALUE!
SSW	1442	1420	1504	1535
SW	1606	1572	1653	1719
WSW	1821	1804	1676	1739
W	1571	1539	1541	1631
WNW	NA	#VALUE!	#VALUE!	#VALUE!
NW	1107	1091	1033	1067
NNW	1920	1904	1846	1880

Garden

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	3716	3699	3633	3673
NNE	3477	3453	3359	3416
NE	3602	3612	3509	3472
SSE	na	#VALUE!	#VALUE!	#VALUE!
S	2067	2045	2127	2157
SSW	na	#VALUE!	#VALUE!	#VALUE!
SW	na	#VALUE!	#VALUE!	#VALUE!
WSW	3445	3428	3300	3363
W	2422	2390	2392	2482
WNW	NA	#VALUE!	#VALUE!	#VALUE!
NW	1110	1094	1036	1070
NNW	1757	1741	1683	1717

Sheep

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	na	#VALUE!	#VALUE!	#VALUE!
NNE	7238	7214	7120	7177
NE	na	#VALUE!	#VALUE!	#VALUE!
SSE	na	#VALUE!	#VALUE!	#VALUE!
S	na	#VALUE!	#VALUE!	#VALUE!
SSW	na	#VALUE!	#VALUE!	#VALUE!
SW	na	#VALUE!	#VALUE!	#VALUE!
WSW	na	#VALUE!	#VALUE!	#VALUE!
W	na	#VALUE!	#VALUE!	#VALUE!
WNW	na	#VALUE!	#VALUE!	#VALUE!
NW	na	#VALUE!	#VALUE!	#VALUE!
NNW	7173	7157	7099	7133

Goat

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	na	#VALUE!	#VALUE!	#VALUE!
NNE	na	#VALUE!	#VALUE!	#VALUE!
NE	na	#VALUE!	#VALUE!	#VALUE!
SSE	na	#VALUE!	#VALUE!	#VALUE!
S	na	#VALUE!	#VALUE!	#VALUE!
SSW	na	#VALUE!	#VALUE!	#VALUE!
SW	na	#VALUE!	#VALUE!	#VALUE!
WSW	na	#VALUE!	#VALUE!	#VALUE!
W	na	#VALUE!	#VALUE!	#VALUE!
WNW	3704	3709	3648	3682
NW	na	#VALUE!	#VALUE!	#VALUE!
NNW	4961	4945	4887	4921

Meat Cow

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	na	#VALUE!	#VALUE!	#VALUE!
NNE	7239	7215	7121	7178
NE	na	#VALUE!	#VALUE!	#VALUE!
SSE	na	#VALUE!	#VALUE!	#VALUE!
S	na	#VALUE!	#VALUE!	#VALUE!
SSW	na	#VALUE!	#VALUE!	#VALUE!
SW	na	#VALUE!	#VALUE!	#VALUE!
WSW	na	#VALUE!	#VALUE!	#VALUE!
W	na	#VALUE!	#VALUE!	#VALUE!
WNW	na	#VALUE!	#VALUE!	#VALUE!
NW	na	#VALUE!	#VALUE!	#VALUE!
NNW	4904	4888	4830	4864

Milk Cow

Sector	**RB-CL**	**RB/FB-VS**	**RW-VS**	**TB-VS**
N	na	#VALUE!	#VALUE!	#VALUE!
NNE	na	#VALUE!	#VALUE!	#VALUE!
NE	na	#VALUE!	#VALUE!	#VALUE!
SSE	na	#VALUE!	#VALUE!	#VALUE!
S	na	#VALUE!	#VALUE!	#VALUE!
SSW	na	#VALUE!	#VALUE!	#VALUE!
SW	na	#VALUE!	#VALUE!	#VALUE!
WSW	na	#VALUE!	#VALUE!	#VALUE!
W	na	#VALUE!	#VALUE!	#VALUE!
WNW	3513	3518	3457	3491
NW	5869	5853	5795	5829
NNW	na	#VALUE!	#VALUE!	#VALUE!

```
00101111000
Fermi COL A (using distances from RB/FB Vent Stack)
    9    7    6   15    5    3    0
   10. 101. 2.26  -8.   0.
    0    0    0    0    0    0    0
    0    0    5    3    5    1   10    6    8    7    5    2    3    0    0    0
    6    3   10   24    3    4    4    8    5    7   10   10   22   17   12    4
   29   35   46   42   42   56   63   59   62   68   58  100   97  133  117   53
   53   63  108  102  106  279  363  243  222  199  137  158  188  221  202  137
   72   44  131  145  141  326  422  320  203  300  174  199  146  208  198  149
   72   48   79  129  181  211  124  123   79  256  200  163  122  127  108  115
   12   14   15   39  116   57    7   10    9   68   79   20   42   33   30   37
   12    7    1    7   37    9    0    1    1   11   18    5    3    5    4    8
    0    0    0    0    2    0    0    0    0    2    1    0    0    0    0    0
    0    0    0    1    0    1    1    0    0    2    0    0    0    0    0    0
    3    2    2    1    0    1    1    4    4    3    5    4   15    9    6    1
   30   23   12   18    7   17   32   14   19   25   28   38   38   45   43   36
   35   23   30   19   18   40   75   61   46   50   57   58   78   70   55   61
   34   20   19   28   25   37   51   39   24   82   58   71   51   43   43   42
   20   19   15   28   35   22   21   12   18   70   84   28   36   25   22   32
    7   12    3   12   17   13    4    2    2   30   43   13   11   14    6    9
    6    1    2    4    7    1    0    0    0   10   25    2    1    2    2    0
    0    0    0    0    0    0    0    0    0    0    4    0    0    0    0    0
    0    0    0    0    0    1    0    0    1    2    1    0    0    0    0    0
    2    5    4    4    1    0    1    0    5    7    4   12   14   10    6   12
   27   24   12    6    5   15   14   15   22   29   37   48   48   57   44   27
   42   30   28   11   20   37   46   39   39   50   51   57   52   48   36   60
   29   23   36   29   19   28   34   32   27   56   77   36   48   39   31   41
   30   21   27   42   28   30   14    6   20   74   77   44   26   27   22   13
   10   22    6   14   18   12    5    7    5   35   48   16   16   20    9    8
    6    0    1   10   10    2    1    1    0    8   45    6    0    3    5    2
    0    0    0    2    1    0    0    0    0    0    6    0    0    0    0    0
    1    0    1    1    1    2    6    2    3    8    7    4    4    3    0    0
   48   29   26   12    6   11   11    8   11   31   36   56   77   71   55   42
  122  169   90   51   47   73   55   60   77   74  186  330  260  216  213  189
  144  180  251  131   93  158  162   93  133  194  391  431  290  256  271  290
  133  131  380  240  179  194  173  103  161  256  483  333  216  180  178  223
  222  133  330  324  240  195  102   92  126  392  585  237  160  152  115  128
   99  105   84  123  163   64   23   18   36  171  346   55   38   77   20   48
   31   34    4   43   79   30    9    2    3   76  125   21    6   11    2   15
    4   10    2    4   26    1    1    2    0    1   28    4    0    0    0    0
    2    0    3    3    4    0    2    1    8    9    4    6    5    3    4    2
   65   45   32   17   20   18   21   31   71   77  128  212  193  193  140   74
  167  225   74   48   54   98   83  114  202  239  464  525  306  352  408  258
  166  159  210  132  131  185  164  197  267  507  340  228  142  139  131  211
   92   60  117  126  123  182  150  142  231  452  158   57   47   58   47   59
   56   39   35   67   91   82   87   94  153  423  113   23   13   29   36   23
   13    6    9   13   55   35   11   14   34  121   42    2    3    6    6    8
    7    2    0    3   26   14    2    0    7   21   10    0    2    1    1    3
    1    0    0    3   10    0    0    2    1    3    3    0    1    2    0    0
    2    1    1    1    0    2    2    3    3    2    3    5    4    3    3    5
   48   32   15   10   12   13   13   40   68   99  134  203  221  265  162   93
  149   66   24   14   18   42   42   72  106  177  221  215  122  212  160  144
   98   35   11   10   32   47   66   93   67  141   26    6    7   14   15   47
   13    9    5   12   20   36   37   57   47   98   14    5    9    2    6    5
    8    3    0    8   16   16   22   32   41   81    9    5    1    6    2    6
    1    0    0    2    8    5    7    7   15   14    2    1    0    1    0    0
    0    0    0    0    8    0    1    3    2    4    0    5    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    2    0    0    0
    0    0    0    0    0    0    0    1    0    0    1    2    2    0    2    0
   23   14    5    1    1    7    9    7   21   23   49  128  223  333  151   77
   63   12    5    4   10   27   37   21   17   60   49   81   49  184   87   91
   20   10    2    2   10   27   37   31   18   29   11    2    2    3    1   19
    4    0    0    2   10   18   22   24    9   15    5    0    0    1    1    0
    1    0    0    0    8   13   20   18    5   16    7    5    0    0    0    0
    0    0    0    0    2    1    3    5    0    0    1    1    0    0    0    0
    0    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
 101. 0.75  2.5  4.5  6.5  8.5 11.5 14.5 18.5 23.5
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
8046780467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
   12   11    9    2    2
Site Boundary
    1 1109    2 1134    3 1413    4 1264    5  911    6  924    7  903    8  903
```

```
    9 1042   10 1507   11 2064   16 1109
Residence
   16 1456    2 1420    3 1572    4 1804    5 1539    7 1091    7 1698    8 1904
   10 2106   10 1995   11 2192
Garden
    1 2045    4 3428    5 2390    7 1094    8 1741    8 2339    9 3699   10 3453
   11 3612
Sheep
    8 7157   10 7214
Goat
    6 3709    8 4945
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

```
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:27

 PRINTOUT OF INPUT CARDS
0    1     00101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL_A (using distances from RW Vent Stack)
     3         9    7    6   15    5    3    0
     4       10.00 101.00   2.26  -8.00    .00
     5        .000   .000   .000   .000   .000   .000   .000
     6        .000   .000  5.000  3.000  5.000  1.000 10.000  6.000  8.000  7.000  5.000  2.000  3.000   .000   .000   .000
     6       6.000  3.000 10.000 24.000  3.000  4.000  4.000  8.000  5.000  7.000 10.000 10.000 22.000 17.000 12.000  4.000
     6      29.000 35.000 46.000 42.000 42.000 56.000 63.000 59.000 62.000 68.000 58.000100.000 97.000133.000117.000 53.000
     6      53.000 63.000108.000102.000106.000279.000363.000243.000222.000199.000137.000158.000188.000221.000202.000137.000
     6      72.000 44.000131.000145.000141.000326.000422.000320.000203.000300.000174.000199.000146.000208.000198.000149.000
     6      72.000 48.000 79.000129.000181.000211.000124.000123.000 79.000256.000200.000163.000122.000127.000108.000115.000
     6      12.000 14.000 15.000 39.000116.000 57.000  7.000 10.000  9.000 68.000 79.000 20.000 42.000 33.000 30.000 37.000
     6      12.000  7.000  1.000  7.000 37.000  9.000   .000  1.000  1.000 11.000 18.000  5.000  3.000  5.000  4.000  8.000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000
     6        .000   .000   .000  1.000   .000  1.000  1.000   .000   .000  2.000   .000   .000   .000   .000   .000   .000
     6       3.000  2.000  2.000  1.000   .000  1.000  1.000  4.000  4.000  3.000  5.000  4.000 15.000  9.000  6.000  1.000
     6      30.000 23.000 12.000 18.000  7.000 17.000 32.000 14.000 19.000 25.000 28.000 38.000 38.000 45.000 43.000 36.000
     6      35.000 23.000 30.000 19.000 18.000 40.000 75.000 61.000 46.000 50.000 57.000 58.000 78.000 70.000 55.000 61.000
     6      34.000 20.000 19.000 28.000 25.000 37.000 51.000 39.000 24.000 82.000 58.000 71.000 51.000 43.000 43.000 42.000
     6      20.000 19.000 15.000 28.000 35.000 22.000 21.000 12.000 18.000 70.000 84.000 28.000 36.000 25.000 22.000 32.000
     6       7.000 12.000  3.000 12.000 17.000 13.000  4.000  2.000  2.000 30.000 43.000 13.000 11.000 14.000  6.000  9.000
     6       6.000  1.000  2.000  4.000  7.000  1.000   .000   .000   .000 10.000 25.000  2.000  1.000  2.000  2.000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  1.000   .000   .000   .000   .000   .000
     6       2.000  5.000  4.000  4.000  1.000   .000  1.000   .000  5.000  7.000  4.000 12.000 14.000 10.000  6.000 12.000
     6      27.000 24.000 12.000  6.000  5.000 15.000 14.000 15.000 22.000 29.000 37.000 48.000 48.000 57.000 44.000 27.000
     6      42.000 30.000 28.000 11.000 20.000 37.000 46.000 39.000 39.000 50.000 51.000 57.000 52.000 48.000 36.000 60.000
     6      29.000 23.000 36.000 29.000 19.000 28.000 34.000 32.000 27.000 56.000 77.000 36.000 48.000 39.000 31.000 41.000
     6      30.000 21.000 27.000 42.000 28.000 30.000 14.000  6.000 20.000 74.000 77.000 44.000 26.000 27.000 22.000 13.000
     6      10.000 22.000  6.000 14.000 18.000 12.000  5.000  7.000  5.000 35.000 48.000 16.000 16.000 20.000  9.000  8.000
     6       6.000   .000  1.000 10.000 10.000  2.000  1.000  1.000   .000  8.000 45.000  6.000   .000  3.000  5.000  2.000
     6        .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000  6.000   .000   .000   .000   .000   .000
     6       1.000   .000  1.000  1.000  1.000  2.000  6.000  2.000  3.000  8.000  7.000  4.000  4.000  3.000   .000   .000
     6      48.000 29.000 26.000 12.000  6.000 11.000 11.000  8.000 11.000 31.000 36.000 56.000 77.000 71.000 55.000 42.000
     6     122.000169.000 90.000 51.000 47.000 73.000 55.000 60.000 77.000 74.000186.000330.000260.000216.000213.000189.000
     6     144.000180.000251.000131.000 93.000158.000162.000 93.000133.000194.000391.000431.000290.000256.000271.000290.000
     6     133.000131.000380.000240.000179.000194.000173.000103.000161.000256.000483.000333.000216.000180.000178.000223.000
     6     222.000133.000330.000324.000240.000195.000102.000 92.000126.000392.000585.000237.000160.000152.000115.000128.000
     6      99.000105.000 84.000123.000163.000 64.000 23.000 18.000 36.000171.000346.000 55.000 38.000 77.000 20.000 48.000
     6      31.000 34.000  4.000 43.000 79.000 30.000  9.000  2.000  3.000 76.000125.000 21.000  6.000 11.000  2.000 15.000
     6       4.000 10.000  2.000  4.000 26.000  1.000  1.000  2.000   .000  1.000 28.000  4.000   .000   .000   .000   .000
     6       2.000   .000  3.000  3.000  4.000   .000  2.000  1.000  8.000  9.000  4.000  6.000  5.000  3.000  4.000  2.000
     6      65.000 45.000 32.000 17.000 20.000 18.000 21.000 31.000 71.000 77.000128.000212.000193.000193.000140.000 74.000
     6     167.000225.000 74.000 48.000 54.000 98.000 83.000114.000202.000239.000464.000525.000306.000352.000408.000258.000
     6     166.000159.000210.000132.000131.000185.000164.000197.000267.000507.000340.000228.000142.000139.000131.000211.000
     6      92.000 60.000117.000126.000123.000182.000150.000142.000231.000452.000158.000 57.000 47.000 58.000 47.000 59.000
     6      56.000 39.000 35.000 67.000 91.000 82.000 87.000 94.000153.000423.000113.000 23.000 13.000 29.000 36.000 23.000
     6      13.000  6.000  9.000 13.000 55.000 35.000 11.000 14.000 34.000121.000 42.000  2.000  3.000  6.000  6.000  8.000
     6       7.000  2.000   .000  3.000 26.000 14.000  2.000   .000  7.000 21.000 10.000   .000  2.000  1.000  1.000  3.000
     6       1.000   .000   .000  3.000 10.000   .000   .000  2.000  1.000  3.000  3.000   .000  1.000  2.000   .000   .000
     6       2.000  1.000  1.000  1.000   .000  2.000  2.000  3.000  3.000  2.000  3.000  5.000  4.000  3.000  3.000  5.000
     6      48.000 32.000 15.000 10.000 12.000 13.000 13.000 40.000 68.000 99.000134.000203.000221.000265.000162.000 93.000
     6     149.000 66.000 24.000 14.000 18.000 42.000 42.000 72.000106.000177.000221.000215.000122.000212.000160.000144.000
     6      98.000 35.000 11.000 10.000 32.000 47.000 66.000 93.000 67.000141.000 26.000  6.000  7.000 14.000 15.000 47.000
     6      13.000  9.000  5.000 12.000 20.000 36.000 37.000 57.000 47.000 98.000 14.000  5.000  9.000  2.000  6.000  5.000
     6       8.000  3.000   .000  8.000 16.000 16.000 22.000 32.000 41.000 81.000  9.000  5.000  1.000  6.000  2.000  6.000
     6       1.000   .000   .000  2.000  8.000  5.000  7.000  7.000 15.000 14.000  2.000  1.000   .000  1.000   .000   .000
     6        .000   .000   .000   .000  8.000   .000  1.000  3.000  2.000  4.000   .000  5.000  1.000   .000   .000   .000
```

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     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  2.000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  2.000   .000  2.000   .000
     6      23.000 14.000  5.000  1.000  1.000  7.000  9.000  7.000 21.000 23.000 49.000128.000223.000333.000151.000 77.000
     6      63.000 12.000  5.000  4.000 10.000 27.000 37.000 21.000 17.000 60.000 49.000 81.000 49.000184.000 87.000 91.000
     6      20.000 10.000  2.000  2.000 10.000 27.000 37.000 31.000 18.000 29.000 11.000  2.000  2.000  3.000  1.000 19.000
     6       4.000   .000   .000  2.000 10.000 18.000 22.000 24.000  9.000 15.000  5.000   .000   .000  1.000  1.000   .000
     6       1.000   .000   .000   .000  8.000 13.000 20.000 18.000  5.000 16.000  7.000  5.000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000  1.000  3.000  5.000   .000   .000  1.000  1.000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     7        101.   .750  2.500  4.500  6.500  8.500 11.500 14.500 18.500 23.500   .000   .000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
    10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
    10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
    11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
    10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
    11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
    12         12    11     9     2     2
    13      Site Boundary
    14        1 1191.0  2 1218.0  3 1494.0  4 1136.0  5  913.0  6  863.0  7  845.0  8  845.0

  9  976.0 10 1413.0 11 1961.0 16 1191.0
    13      Residence
    14       16 1538.0  2 1504.0  3 1653.0  4 1676.0  5 1541.0  7 1033.0  7 1640.0  8 1846.0

 10 2012.0 10 1901.0 11 2089.0
    13      Garden
    14        1 2127.0  4 3300.0  5 2392.0  7 1036.0  8 1638.0  8 2272.0  9 3633.0 10 3359.0

 11 3509.0
    13      Sheep
    14        8 7099.0 10 7120.0
    13      Goat
    14        6 3648.0  8 4887.0
    15      Ground Level/Radwaste Bldg
    16         .000   .000   10.0     .0  350.0   10.0   .00
    17          0    0    0
    15      Reactor Bldg/Fuel Bldg Stack
    16       17.780  2.400   52.6   48.0     .0   52.6   .00
    17          0    0    0
    15      Turbine Bldg Stack
    16       17.780  1.950   71.3   52.0     .0   71.3   .00
    17          0    0    0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:27

     Fermi COL A (using distances from RW Vent Stack)

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)       N    NNE     NE    ENE      E    ESE     SE    SSE      S    SSW     SW    WSW      W    WNW     NW    NNW  TOTAL
   .34         .000   .000   .010   .006   .010   .002   .020   .012   .016   .014   .010   .004   .006   .000   .000   .000   .110
  1.12         .012   .006   .020   .048   .006   .008   .008   .016   .010   .014   .020   .020   .044   .034   .024   .008   .298
  2.01         .058   .070   .092   .084   .084   .112   .126   .118   .124   .136   .116   .200   .194   .266   .234   .106  2.117
  2.91         .106   .126   .216   .204   .212   .557   .725   .485   .443   .397   .274   .316   .375   .441   .403   .274  5.554
  3.80         .144   .088   .262   .290   .282   .651   .843   .639   .405   .599   .347   .397   .292   .415   .395   .298  6.347
```

5.14	.144	.096	.158	.258	.361	.421	.248	.246	.158	.511	.399	.326	.244	.254	.216	.230	4.268
6.48	.024	.028	.030	.078	.232	.114	.014	.020	.018	.136	.158	.040	.084	.066	.060	.074	1.174
8.27	.024	.014	.002	.014	.074	.018	.000	.002	.002	.022	.036	.010	.006	.010	.008	.016	.258
10.51	.000	.000	.000	.000	.004	.000	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.010
TOTAL	.51	.43	.79	.98	1.26	1.88	1.98	1.54	1.18	1.83	1.36	1.31	1.24	1.49	1.34	1.00	20.14

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.002	.000	.002	.002	.000	.000	.004	.000	.000	.000	.000	.000	.000	.010
1.12	.006	.004	.004	.002	.000	.002	.002	.008	.008	.006	.010	.008	.030	.018	.012	.002	.122
2.01	.060	.046	.024	.036	.014	.034	.064	.028	.038	.050	.056	.076	.076	.090	.086	.072	.849
2.91	.070	.046	.060	.038	.036	.080	.150	.122	.092	.100	.114	.116	.156	.140	.110	.122	1.550
3.80	.068	.040	.038	.056	.050	.074	.102	.078	.048	.164	.116	.142	.102	.086	.086	.084	1.332
5.14	.040	.038	.030	.056	.070	.044	.042	.024	.036	.140	.168	.056	.072	.050	.044	.064	.973
6.48	.014	.024	.006	.024	.034	.026	.008	.004	.004	.060	.086	.026	.022	.028	.012	.018	.395
8.27	.012	.002	.004	.008	.014	.002	.000	.000	.000	.020	.050	.004	.002	.004	.004	.000	.126
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008	.000	.000	.000	.000	.000	.008
TOTAL	.27	.20	.17	.22	.22	.26	.37	.26	.23	.54	.61	.43	.46	.42	.35	.36	5.36

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.002	.000	.000	.000	.000	.000	.010
1.12	.004	.010	.008	.008	.002	.000	.002	.000	.010	.014	.008	.024	.028	.020	.012	.024	.174
2.01	.054	.048	.024	.012	.010	.030	.028	.030	.044	.058	.074	.096	.096	.114	.088	.054	.859
2.91	.084	.060	.056	.022	.040	.074	.092	.078	.078	.100	.102	.114	.104	.096	.072	.120	1.290
3.80	.058	.046	.072	.058	.038	.056	.068	.064	.054	.112	.154	.072	.096	.078	.062	.082	1.168
5.14	.060	.042	.054	.084	.056	.060	.028	.012	.040	.148	.154	.088	.052	.054	.044	.026	1.001
6.48	.020	.044	.012	.028	.036	.024	.010	.014	.010	.070	.096	.032	.032	.040	.018	.016	.501
8.27	.012	.000	.002	.020	.020	.004	.002	.002	.000	.016	.090	.012	.000	.006	.010	.004	.200
10.51	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.012	.000	.000	.000	.000	.000	.018
TOTAL	.29	.25	.23	.24	.20	.25	.23	.20	.24	.52	.69	.44	.41	.41	.31	.33	5.22

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.002	.000	.002	.002	.002	.004	.012	.004	.006	.016	.014	.008	.008	.006	.000	.000	.086
1.12	.096	.058	.052	.024	.012	.022	.022	.016	.022	.062	.072	.112	.154	.142	.110	.084	1.058
2.01	.244	.338	.180	.102	.094	.146	.110	.120	.154	.148	.371	.659	.519	.431	.425	.377	4.418
2.91	.288	.359	.501	.262	.186	.316	.324	.186	.266	.387	.781	.861	.579	.511	.541	.579	6.926
3.80	.266	.262	.759	.479	.357	.387	.346	.206	.322	.511	.965	.665	.431	.359	.355	.445	7.116
5.14	.443	.266	.659	.647	.479	.389	.204	.184	.252	.783	1.168	.473	.320	.304	.230	.256	7.056
6.48	.198	.210	.168	.246	.326	.128	.046	.036	.072	.342	.691	.110	.076	.154	.040	.096	2.936
8.27	.062	.068	.008	.086	.158	.060	.018	.004	.006	.152	.250	.042	.012	.022	.004	.030	.981
10.51	.008	.020	.004	.008	.052	.002	.002	.004	.000	.002	.056	.008	.000	.000	.000	.000	.166
TOTAL	1.61	1.58	2.33	1.86	1.67	1.45	1.08	.76	1.10	2.40	4.37	2.94	2.10	1.93	1.71	1.87	30.74

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.000	.006	.006	.008	.000	.004	.002	.016	.018	.008	.012	.010	.006	.008	.004	.112
1.12	.130	.090	.064	.034	.040	.036	.042	.062	.142	.154	.256	.423	.385	.385	.280	.148	2.670
2.01	.334	.449	.148	.096	.108	.196	.166	.228	.403	.477	.927	1.048	.611	.703	.815	.515	7.224
2.91	.332	.318	.419	.264	.262	.369	.328	.393	.533	1.013	.679	.455	.284	.278	.262	.421	6.608
3.80	.184	.120	.234	.252	.246	.363	.300	.284	.461	.903	.316	.114	.094	.116	.094	.118	4.196
5.14	.112	.078	.070	.134	.182	.164	.174	.188	.306	.845	.226	.046	.026	.058	.072	.046	2.724
6.48	.026	.012	.018	.026	.110	.070	.022	.028	.068	.242	.084	.004	.006	.012	.012	.016	.755
8.27	.014	.004	.000	.006	.052	.028	.004	.000	.014	.042	.020	.000	.004	.002	.002	.006	.198
10.51	.002	.000	.000	.006	.020	.000	.000	.004	.002	.006	.006	.000	.002	.004	.000	.000	.052
TOTAL	1.14	1.07	.96	.82	1.03	1.23	1.04	1.19	1.95	3.70	2.52	2.10	1.42	1.56	1.54	1.27	24.54

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.002	.002	.002	.000	.004	.004	.006	.006	.004	.006	.010	.008	.006	.006	.010	.080

1.12	.096	.064	.030	.020	.024	.026	.026	.080	.136	.198	.268	.405	.441	.529	.324	.186	2.852
2.01	.298	.132	.048	.028	.036	.084	.084	.144	.212	.353	.441	.429	.244	.423	.320	.288	3.563
2.91	.196	.070	.022	.020	.064	.094	.132	.186	.134	.282	.052	.012	.014	.028	.030	.094	1.428
3.80	.026	.018	.010	.024	.040	.072	.074	.114	.094	.196	.028	.010	.018	.004	.012	.010	.749
5.14	.016	.006	.000	.016	.032	.032	.044	.064	.082	.162	.018	.010	.002	.012	.004	.012	.511
6.48	.002	.000	.000	.004	.016	.010	.014	.014	.030	.028	.004	.002	.000	.002	.000	.000	.126
8.27	.000	.000	.000	.000	.016	.000	.002	.006	.004	.008	.000	.010	.002	.000	.000	.000	.048
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.004	.000	.000	.000	.010
TOTAL	.64	.29	.11	.11	.23	.32	.38	.61	.70	1.23	.82	.89	.73	1.00	.69	.60	9.37

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.004	.000	.004	.000	.016
1.12	.046	.028	.010	.002	.002	.014	.018	.014	.042	.046	.098	.256	.445	.665	.302	.154	2.141
2.01	.126	.024	.010	.008	.020	.054	.074	.042	.034	.120	.098	.162	.098	.367	.174	.182	1.592
2.91	.040	.020	.004	.004	.020	.054	.074	.062	.036	.058	.022	.004	.004	.006	.002	.038	.447
3.80	.008	.000	.000	.004	.020	.036	.044	.048	.018	.030	.010	.000	.000	.002	.002	.000	.222
5.14	.002	.000	.000	.000	.016	.026	.040	.036	.010	.032	.014	.010	.000	.000	.000	.000	.186
6.48	.000	.000	.000	.000	.004	.002	.006	.010	.000	.000	.002	.002	.000	.000	.000	.000	.026
8.27	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
10.51	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
TOTAL	.22	.07	.02	.02	.08	.19	.26	.21	.14	.29	.25	.44	.55	1.04	.48	.37	4.63

TOTAL HOURS CONSIDERED ARE 50072
0WIND MEASURED AT 10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.7	3.9	4.6	4.2	4.7	5.6	5.3	4.8	5.5	10.5	10.6	8.5	6.9	7.8	6.4	5.8	100.0

0OVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.335	1.118	2.012	2.906	3.800	5.141	6.482	8.270	10.505
AVE WIND SPEED (M/S):	.168	.726	1.565	2.459	3.353	4.470	5.812	7.376	9.388
WIND SPEED FREQUENCY:	.42	9.31	20.62	23.80	21.13	16.72	5.91	1.81	.27

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSESS IS .447
0DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500

S	4.212E-05	1.224E-05	5.968E-06	2.845E-06	1.070E-06	5.615E-07	3.493E-07	2.408E-07	1.777E-07	1.377E-07	1.106E-07
SSW	2.990E-05	8.693E-06	4.257E-06	2.027E-06	7.586E-07	3.959E-07	2.451E-07	1.682E-07	1.237E-07	9.553E-08	7.650E-08
SW	2.490E-05	7.149E-06	3.497E-06	1.661E-06	6.193E-07	3.216E-07	1.982E-07	1.355E-07	9.926E-08	7.638E-08	6.096E-08
WSW	1.860E-05	5.285E-06	2.573E-06	1.220E-06	4.547E-07	2.362E-07	1.456E-07	9.955E-08	7.295E-08	5.616E-08	4.484E-08
W	2.015E-05	5.745E-06	2.796E-06	1.328E-06	4.974E-07	2.597E-07	1.608E-07	1.104E-07	8.116E-08	6.266E-08	5.018E-08
WNW	2.792E-05	7.916E-06	3.832E-06	1.820E-06	6.839E-07	3.582E-07	2.225E-07	1.532E-07	1.130E-07	8.746E-08	7.020E-08
NW	2.942E-05	8.268E-06	3.981E-06	1.889E-06	7.115E-07	3.736E-07	2.326E-07	1.605E-07	1.185E-07	9.191E-08	7.388E-08
NNW	3.201E-05	9.137E-06	4.425E-06	2.105E-06	7.945E-07	4.181E-07	2.607E-07	1.802E-07	1.333E-07	1.035E-07	8.324E-08
N	4.464E-05	1.291E-05	6.302E-06	3.000E-06	1.130E-06	5.929E-07	3.689E-07	2.544E-07	1.879E-07	1.456E-07	1.170E-07
NNE	7.320E-05	2.121E-05	1.036E-05	4.931E-06	1.854E-06	9.724E-07	6.046E-07	4.166E-07	3.074E-07	2.381E-07	1.912E-07
NE	8.036E-05	2.333E-05	1.140E-05	5.430E-06	2.038E-06	1.067E-06	6.621E-07	4.555E-07	3.356E-07	2.596E-07	2.082E-07
ENE	9.779E-05	2.840E-05	1.384E-05	6.605E-06	2.491E-06	1.309E-06	8.159E-07	5.633E-07	4.164E-07	3.230E-07	2.597E-07
E	9.458E-05	2.735E-05	1.326E-05	6.333E-06	2.396E-06	1.264E-06	7.898E-07	5.468E-07	4.051E-07	3.150E-07	2.538E-07
ESE	1.214E-04	3.511E-05	1.698E-05	8.117E-06	3.083E-06	1.632E-06	1.024E-06	7.107E-07	5.279E-07	4.113E-07	3.321E-07
SE	7.993E-05	2.313E-05	1.123E-05	5.359E-06	2.028E-06	1.069E-06	6.683E-07	4.627E-07	3.428E-07	2.665E-07	2.147E-07
SSE	5.915E-05	1.711E-05	8.318E-06	3.968E-06	1.497E-06	7.872E-07	4.908E-07	3.391E-07	2.507E-07	1.946E-07	1.566E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.136E-08	4.677E-08	3.031E-08	1.743E-08	1.184E-08	8.802E-09	6.917E-09	5.648E-09	4.742E-09	4.067E-09	3.546E-09
SSW	6.301E-08	3.189E-08	2.049E-08	1.164E-08	7.844E-09	5.790E-09	4.525E-09	3.677E-09	3.075E-09	2.627E-09	2.284E-09
SW	5.007E-08	2.505E-08	1.595E-08	8.949E-09	5.975E-09	4.379E-09	3.403E-09	2.752E-09	2.292E-09	1.951E-09	1.691E-09
WSW	3.685E-08	1.849E-08	1.180E-08	6.646E-09	4.452E-09	3.271E-09	2.547E-09	2.064E-09	1.722E-09	1.468E-09	1.274E-09
W	4.134E-08	2.093E-08	1.345E-08	7.650E-09	5.158E-09	3.809E-09	2.979E-09	2.422E-09	2.027E-09	1.733E-09	1.507E-09
WNW	5.795E-08	2.962E-08	1.917E-08	1.102E-08	7.488E-09	5.565E-09	4.375E-09	3.574E-09	3.002E-09	2.575E-09	2.247E-09
NW	6.109E-08	3.143E-08	2.045E-08	1.183E-08	8.083E-09	6.032E-09	4.757E-09	3.897E-09	3.281E-09	2.822E-09	2.466E-09
NNW	6.888E-08	3.550E-08	2.312E-08	1.339E-08	9.147E-09	6.824E-09	5.380E-09	4.405E-09	3.707E-09	3.186E-09	2.784E-09
N	9.663E-08	4.948E-08	3.206E-08	1.844E-08	1.252E-08	9.303E-09	7.307E-09	5.964E-09	5.006E-09	4.292E-09	3.741E-09
NNE	1.579E-07	8.075E-08	5.228E-08	3.002E-08	2.038E-08	1.513E-08	1.188E-08	9.690E-09	8.130E-09	6.968E-09	6.072E-09
NE	1.718E-07	8.745E-08	5.643E-08	3.226E-08	2.183E-08	1.617E-08	1.267E-08	1.032E-08	8.649E-09	7.404E-09	6.446E-09
ENE	2.147E-07	1.103E-07	7.165E-08	4.135E-08	2.817E-08	2.097E-08	1.650E-08	1.349E-08	1.134E-08	9.734E-09	8.496E-09
E	2.102E-07	1.088E-07	7.111E-08	4.140E-08	2.838E-08	2.123E-08	1.678E-08	1.376E-08	1.161E-08	9.990E-09	8.740E-09
ESE	2.756E-07	1.437E-07	9.437E-08	5.533E-08	3.811E-08	2.862E-08	2.269E-08	1.866E-08	1.577E-08	1.360E-08	1.192E-08
SE	1.778E-07	9.200E-08	6.009E-08	3.495E-08	2.394E-08	1.790E-08	1.414E-08	1.159E-08	9.770E-09	8.407E-09	7.352E-09
SSE	1.295E-07	6.668E-08	4.340E-08	2.512E-08	1.715E-08	1.279E-08	1.008E-08	8.257E-09	6.949E-09	5.972E-09	5.218E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.973E-06	1.239E-06	3.625E-07	1.805E-07	1.115E-07	4.936E-08	1.781E-08	8.859E-09	5.665E-09	4.074E-09
SSW	4.251E-06	8.791E-07	2.546E-07	1.257E-07	7.714E-08	3.374E-08	1.192E-08	5.832E-09	3.690E-09	2.633E-09
SW	3.493E-06	7.185E-07	2.060E-07	1.009E-07	6.150E-08	2.657E-08	9.183E-09	4.414E-09	2.763E-09	1.956E-09
WSW	2.574E-06	5.276E-07	1.513E-07	7.415E-08	4.523E-08	1.960E-08	6.817E-09	3.296E-09	2.072E-09	1.471E-09
W	2.799E-06	5.763E-07	1.670E-07	8.246E-08	5.060E-08	2.214E-08	7.832E-09	3.837E-09	2.431E-09	1.736E-09
WNW	3.845E-06	7.916E-07	2.310E-07	1.148E-07	7.078E-08	3.127E-08	1.126E-08	5.602E-09	3.585E-09	2.580E-09
NW	4.004E-06	8.230E-07	2.413E-07	1.204E-07	7.448E-08	3.314E-08	1.208E-08	6.069E-09	3.908E-09	2.826E-09
NNW	4.441E-06	9.184E-07	2.705E-07	1.353E-07	8.391E-08	3.741E-08	1.367E-08	6.866E-09	4.418E-09	3.192E-09

N	6.304E-06	1.307E-06	3.828E-07	1.908E-07	1.179E-07	5.221E-08	1.884E-08	9.364E-09	5.983E-09	4.299E-09
NNE	1.036E-05	2.146E-06	6.275E-07	3.122E-07	1.928E-07	8.524E-08	3.068E-08	1.523E-08	9.720E-09	6.980E-09
NE	1.140E-05	2.360E-06	6.874E-07	3.409E-07	2.100E-07	9.240E-08	3.300E-08	1.628E-08	1.036E-08	7.418E-09
ENE	1.386E-05	2.880E-06	8.465E-07	4.228E-07	2.618E-07	1.163E-07	4.223E-08	2.110E-08	1.353E-08	9.751E-09
E	1.331E-05	2.767E-06	8.189E-07	4.112E-07	2.558E-07	1.146E-07	4.221E-08	2.135E-08	1.380E-08	1.001E-08
ESE	1.707E-05	3.557E-06	1.061E-06	5.357E-07	3.347E-07	1.511E-07	5.635E-08	2.878E-08	1.871E-08	1.362E-08
SE	1.126E-05	2.342E-06	6.930E-07	3.480E-07	2.164E-07	9.689E-08	3.564E-08	1.800E-08	1.162E-08	8.420E-09
SSE	8.339E-06	1.730E-06	5.092E-07	2.546E-07	1.578E-07	7.029E-08	2.564E-08	1.287E-08	8.281E-09	5.982E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.206E-05	1.220E-05	5.945E-06	2.830E-06	1.062E-06	5.556E-07	3.447E-07	2.370E-07	1.745E-07	1.348E-07	1.080E-07
SSW	2.987E-05	8.673E-06	4.243E-06	2.017E-06	7.534E-07	3.923E-07	2.423E-07	1.659E-07	1.217E-07	9.378E-08	7.492E-08
SW	2.487E-05	7.132E-06	3.484E-06	1.653E-06	6.147E-07	3.184E-07	1.957E-07	1.335E-07	9.752E-08	7.485E-08	5.960E-08
WSW	1.858E-05	5.271E-06	2.563E-06	1.214E-06	4.512E-07	2.338E-07	1.437E-07	9.803E-08	7.165E-08	5.501E-08	4.382E-08
W	2.013E-05	5.732E-06	2.786E-06	1.322E-06	4.940E-07	2.573E-07	1.589E-07	1.088E-07	7.986E-08	6.152E-08	4.915E-08
WNW	2.789E-05	7.899E-06	3.820E-06	1.812E-06	6.794E-07	3.551E-07	2.201E-07	1.512E-07	1.113E-07	8.595E-08	6.884E-08
NW	2.938E-05	8.244E-06	3.964E-06	1.878E-06	7.055E-07	3.694E-07	2.293E-07	1.578E-07	1.162E-07	8.989E-08	7.206E-08
NNW	3.196E-05	9.110E-06	4.406E-06	2.093E-06	7.877E-07	4.133E-07	2.570E-07	1.771E-07	1.306E-07	1.011E-07	8.111E-08
N	4.457E-05	1.287E-05	6.271E-06	2.981E-06	1.119E-06	5.852E-07	3.630E-07	2.495E-07	1.836E-07	1.419E-07	1.136E-07
NNE	7.310E-05	2.116E-05	1.032E-05	4.904E-06	1.839E-06	9.618E-07	5.964E-07	4.099E-07	3.017E-07	2.330E-07	1.866E-07
NE	8.025E-05	2.326E-05	1.135E-05	5.399E-06	2.021E-06	1.054E-06	6.525E-07	4.476E-07	3.289E-07	2.536E-07	2.028E-07
ENE	9.763E-05	2.830E-05	1.377E-05	6.560E-06	2.465E-06	1.291E-06	8.019E-07	5.518E-07	4.064E-07	3.142E-07	2.517E-07
E	9.441E-05	2.725E-05	1.319E-05	6.285E-06	2.369E-06	1.245E-06	7.750E-07	5.345E-07	3.945E-07	3.056E-07	2.453E-07
ESE	1.212E-04	3.499E-05	1.689E-05	8.063E-06	3.052E-06	1.610E-06	1.006E-06	6.964E-07	5.156E-07	4.004E-07	3.222E-07
SE	7.980E-05	2.305E-05	1.117E-05	5.323E-06	2.007E-06	1.055E-06	6.570E-07	4.532E-07	3.346E-07	2.592E-07	2.081E-07
SSE	5.906E-05	1.706E-05	8.280E-06	3.944E-06	1.483E-06	7.777E-07	4.834E-07	3.329E-07	2.454E-07	1.899E-07	1.523E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.898E-08	4.496E-08	2.876E-08	1.613E-08	1.069E-08	7.754E-09	5.949E-09	4.745E-09	3.893E-09	3.264E-09	2.783E-09
SSW	6.157E-08	3.080E-08	1.956E-08	1.085E-08	7.146E-09	5.154E-09	3.937E-09	3.128E-09	2.558E-09	2.138E-09	1.818E-09
SW	4.882E-08	2.411E-08	1.517E-08	8.300E-09	5.411E-09	3.875E-09	2.944E-09	2.330E-09	1.899E-09	1.583E-09	1.344E-09
WSW	3.592E-08	1.779E-08	1.122E-08	6.165E-09	4.034E-09	2.899E-09	2.210E-09	1.755E-09	1.435E-09	1.201E-09	1.023E-09
W	4.040E-08	2.023E-08	1.286E-08	7.160E-09	4.731E-09	3.427E-09	2.631E-09	2.101E-09	1.728E-09	1.453E-09	1.243E-09
WNW	5.671E-08	2.868E-08	1.837E-08	1.035E-08	6.897E-09	5.030E-09	3.882E-09	3.115E-09	2.571E-09	2.168E-09	1.860E-09
NW	5.943E-08	3.018E-08	1.939E-08	1.095E-08	7.312E-09	5.339E-09	4.123E-09	3.311E-09	2.734E-09	2.307E-09	1.980E-09
NNW	6.692E-08	3.401E-08	2.185E-08	1.232E-08	8.207E-09	5.976E-09	4.602E-09	3.685E-09	3.034E-09	2.553E-09	2.186E-09
N	9.356E-08	4.717E-08	3.010E-08	1.681E-08	1.110E-08	8.020E-09	6.136E-09	4.882E-09	3.997E-09	3.345E-09	2.848E-09
NNE	1.537E-07	7.761E-08	4.961E-08	2.780E-08	1.843E-08	1.337E-08	1.027E-08	8.200E-09	6.737E-09	5.656E-09	4.831E-09
NE	1.668E-07	8.371E-08	5.325E-08	2.959E-08	1.948E-08	1.404E-08	1.071E-08	8.502E-09	6.944E-09	5.797E-09	4.923E-09
ENE	2.074E-07	1.047E-07	6.687E-08	3.731E-08	2.459E-08	1.772E-08	1.351E-08	1.070E-08	8.720E-09	7.261E-09	6.149E-09
E	2.024E-07	1.028E-07	6.595E-08	3.700E-08	2.446E-08	1.765E-08	1.346E-08	1.067E-08	8.689E-09	7.228E-09	6.113E-09
ESE	2.665E-07	1.366E-07	8.822E-08	5.002E-08	3.333E-08	2.422E-08	1.859E-08	1.480E-08	1.211E-08	1.012E-08	8.587E-09
SE	1.718E-07	8.736E-08	5.609E-08	3.154E-08	2.089E-08	1.511E-08	1.156E-08	9.180E-09	7.496E-09	6.252E-09	5.302E-09
SSE	1.256E-07	6.368E-08	4.082E-08	2.293E-08	1.521E-08	1.102E-08	8.444E-09	6.723E-09	5.505E-09	4.604E-09	3.916E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 10.00 REP. WIND HEIGHT (METERS) 10.0

DIAMETER (METERS) .00
EXIT VELOCITY (METERS) .00

BUILDING HEIGHT (METERS) .0
BLDG.MIN.CRS.SEC.AREA (SQ.METERS) 350.0
HEAT EMISSION RATE (CAL/SEC) .0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.951E-06	1.230E-06	3.579E-07	1.772E-07	1.089E-07	4.754E-08	1.652E-08	7.815E-09	4.765E-09	3.272E-09
SSW	4.238E-06	8.738E-07	2.517E-07	1.237E-07	7.556E-08	3.264E-08	1.114E-08	5.199E-09	3.142E-09	2.144E-09
SW	3.481E-06	7.138E-07	2.036E-07	9.916E-08	6.013E-08	2.563E-08	8.542E-09	3.912E-09	2.341E-09	1.588E-09
WSW	2.565E-06	5.240E-07	1.495E-07	7.285E-08	4.421E-08	1.890E-08	6.340E-09	2.926E-09	1.763E-09	1.204E-09
W	2.790E-06	5.727E-07	1.651E-07	8.115E-08	4.957E-08	2.143E-08	7.347E-09	3.456E-09	2.110E-09	1.457E-09
WNW	3.834E-06	7.869E-07	2.286E-07	1.130E-07	6.942E-08	3.033E-08	1.060E-08	5.069E-09	3.127E-09	2.174E-09
NW	3.988E-06	8.167E-07	2.381E-07	1.181E-07	7.267E-08	3.188E-08	1.121E-08	5.379E-09	3.323E-09	2.313E-09
NNW	4.424E-06	9.113E-07	2.667E-07	1.326E-07	8.178E-08	3.592E-08	1.261E-08	6.021E-09	3.699E-09	2.560E-09
N	6.276E-06	1.295E-06	3.769E-07	1.865E-07	1.146E-07	4.989E-08	1.722E-08	8.087E-09	4.903E-09	3.354E-09
NNE	1.032E-05	2.130E-06	6.193E-07	3.065E-07	1.882E-07	8.208E-08	2.848E-08	1.348E-08	8.234E-09	5.671E-09
NE	1.135E-05	2.342E-06	6.778E-07	3.341E-07	2.046E-07	8.864E-08	3.035E-08	1.416E-08	8.540E-09	5.813E-09
ENE	1.380E-05	2.853E-06	8.324E-07	4.128E-07	2.538E-07	1.107E-07	3.823E-08	1.786E-08	1.075E-08	7.281E-09
E	1.325E-05	2.740E-06	8.041E-07	4.006E-07	2.473E-07	1.086E-07	3.786E-08	1.779E-08	1.071E-08	7.248E-09
ESE	1.699E-05	3.525E-06	1.043E-06	5.234E-07	3.247E-07	1.440E-07	5.109E-08	2.440E-08	1.486E-08	1.014E-08
SE	1.121E-05	2.321E-06	6.816E-07	3.398E-07	2.098E-07	9.222E-08	3.226E-08	1.523E-08	9.218E-09	6.269E-09
SSE	8.305E-06	1.716E-06	5.017E-07	2.493E-07	1.535E-07	6.728E-08	2.347E-08	1.111E-08	6.751E-09	4.616E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.985E-05	1.116E-05	5.313E-06	2.487E-06	9.071E-07	4.636E-07	2.819E-07	1.904E-07	1.379E-07	1.051E-07	8.306E-08
SSW	2.829E-05	7.933E-06	3.790E-06	1.772E-06	6.430E-07	3.270E-07	1.979E-07	1.331E-07	9.610E-08	7.295E-08	5.750E-08
SW	2.355E-05	6.524E-06	3.113E-06	1.452E-06	5.249E-07	2.656E-07	1.600E-07	1.072E-07	7.706E-08	5.829E-08	4.579E-08
WSW	1.760E-05	4.822E-06	2.290E-06	1.066E-06	3.853E-07	1.950E-07	1.175E-07	7.873E-08	5.663E-08	4.285E-08	3.368E-08
W	1.907E-05	5.243E-06	2.489E-06	1.161E-06	4.216E-07	2.144E-07	1.298E-07	8.732E-08	6.303E-08	4.785E-08	3.771E-08
WNW	2.641E-05	7.225E-06	3.412E-06	1.591E-06	5.798E-07	2.959E-07	1.797E-07	1.213E-07	8.778E-08	6.681E-08	5.278E-08
NW	2.783E-05	7.544E-06	3.543E-06	1.651E-06	6.028E-07	3.084E-07	1.876E-07	1.268E-07	9.197E-08	7.010E-08	5.546E-08
NNW	3.028E-05	8.337E-06	3.939E-06	1.840E-06	6.731E-07	3.450E-07	2.103E-07	1.424E-07	1.034E-07	7.889E-08	6.247E-08
N	4.223E-05	1.178E-05	5.608E-06	2.621E-06	9.566E-07	4.891E-07	2.975E-07	2.010E-07	1.456E-07	1.109E-07	8.769E-08
NNE	6.925E-05	1.936E-05	9.220E-06	4.310E-06	1.571E-06	8.027E-07	4.878E-07	3.294E-07	2.386E-07	1.817E-07	1.436E-07
NE	7.602E-05	2.128E-05	1.015E-05	4.745E-06	1.727E-06	8.804E-07	5.341E-07	3.600E-07	2.604E-07	1.980E-07	1.563E-07
ENE	9.251E-05	2.591E-05	1.232E-05	5.770E-06	2.109E-06	1.080E-06	6.577E-07	4.448E-07	3.227E-07	2.460E-07	1.946E-07
E	8.947E-05	2.495E-05	1.180E-05	5.532E-06	2.028E-06	1.042E-06	6.363E-07	4.315E-07	3.137E-07	2.397E-07	1.900E-07
ESE	1.149E-04	3.203E-05	1.511E-05	7.092E-06	2.611E-06	1.346E-06	8.251E-07	5.612E-07	4.092E-07	3.134E-07	2.490E-07
SE	7.561E-05	2.110E-05	9.990E-06	4.682E-06	1.717E-06	8.820E-07	5.387E-07	3.653E-07	2.656E-07	2.029E-07	1.609E-07
SSE	5.596E-05	1.562E-05	7.403E-06	3.467E-06	1.268E-06	6.496E-07	3.959E-07	2.679E-07	1.945E-07	1.483E-07	1.174E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.759E-08	3.260E-08	2.006E-08	1.060E-08	6.713E-09	4.692E-09	3.488E-09	2.707E-09	2.167E-09	1.777E-09	1.485E-09
SSW	4.666E-08	2.226E-08	1.358E-08	7.095E-09	4.459E-09	3.097E-09	2.292E-09	1.771E-09	1.412E-09	1.154E-09	9.618E-10
SW	3.705E-08	1.746E-08	1.056E-08	5.442E-09	3.387E-09	2.334E-09	1.716E-09	1.319E-09	1.047E-09	8.522E-10	7.074E-10
WSW	2.727E-08	1.289E-08	7.811E-09	4.040E-09	2.522E-09	1.743E-09	1.284E-09	9.890E-10	7.866E-10	6.414E-10	5.332E-10
W	3.061E-08	1.461E-08	8.919E-09	4.664E-09	2.934E-09	2.040E-09	1.511E-09	1.169E-09	9.337E-10	7.642E-10	6.375E-10
WNW	4.293E-08	2.069E-08	1.272E-08	6.726E-09	4.267E-09	2.987E-09	2.225E-09	1.730E-09	1.387E-09	1.140E-09	9.539E-10
NW	4.518E-08	2.190E-08	1.352E-08	7.190E-09	4.578E-09	3.214E-09	2.399E-09	1.868E-09	1.500E-09	1.234E-09	1.034E-09
NNW	5.092E-08	2.472E-08	1.528E-08	8.123E-09	5.169E-09	3.624E-09	2.702E-09	2.102E-09	1.686E-09	1.385E-09	1.159E-09
N	7.136E-08	3.440E-08	2.115E-08	1.115E-08	7.052E-09	4.919E-09	3.651E-09	2.828E-09	2.261E-09	1.851E-09	1.544E-09
NNE	1.168E-07	5.627E-08	3.459E-08	1.825E-08	1.155E-08	8.064E-09	5.991E-09	4.646E-09	3.718E-09	3.047E-09	2.545E-09
NE	1.270E-07	6.088E-08	3.728E-08	1.956E-08	1.233E-08	8.578E-09	6.354E-09	4.914E-09	3.922E-09	3.207E-09	2.672E-09
ENE	1.585E-07	7.661E-08	4.719E-08	2.496E-08	1.581E-08	1.104E-08	8.199E-09	6.354E-09	5.080E-09	4.159E-09	3.469E-09
E	1.550E-07	7.549E-08	4.675E-08	2.492E-08	1.587E-08	1.113E-08	8.294E-09	6.445E-09	5.164E-09	4.236E-09	3.539E-09
ESE	2.035E-07	9.985E-08	6.219E-08	3.343E-08	2.142E-08	1.510E-08	1.130E-08	8.812E-09	7.084E-09	5.828E-09	4.883E-09
SE	1.312E-07	6.390E-08	3.958E-08	2.110E-08	1.344E-08	9.425E-09	7.026E-09	5.462E-09	4.378E-09	3.593E-09	3.003E-09
SSE	9.570E-08	4.639E-08	2.865E-08	1.521E-08	9.670E-09	6.774E-09	5.046E-09	3.921E-09	3.142E-09	2.578E-09	2.155E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.357E-06	1.061E-06	2.937E-07	1.404E-07	8.385E-08	3.480E-08	1.097E-08	4.749E-09	2.725E-09	1.784E-09
SSW	3.814E-06	7.533E-07	2.064E-07	9.786E-08	5.806E-08	2.383E-08	7.366E-09	3.138E-09	1.783E-09	1.160E-09
SW	3.133E-06	6.157E-07	1.670E-07	7.851E-08	4.626E-08	1.875E-08	5.666E-09	2.368E-09	1.329E-09	8.563E-10
WSW	2.309E-06	4.520E-07	1.226E-07	5.770E-08	3.402E-08	1.383E-08	4.204E-09	1.767E-09	9.963E-10	6.443E-10
W	2.511E-06	4.938E-07	1.354E-07	6.419E-08	3.809E-08	1.564E-08	4.841E-09	2.067E-09	1.177E-09	7.675E-10
WNW	3.450E-06	6.783E-07	1.873E-07	8.935E-08	5.329E-08	2.209E-08	6.965E-09	3.023E-09	1.741E-09	1.144E-09
NW	3.591E-06	7.048E-07	1.955E-07	9.360E-08	5.599E-08	2.335E-08	7.437E-09	3.252E-09	1.880E-09	1.239E-09
NNW	3.983E-06	7.865E-07	2.191E-07	1.052E-07	6.306E-08	2.634E-08	8.400E-09	3.667E-09	2.115E-09	1.390E-09
N	5.653E-06	1.119E-06	3.100E-07	1.482E-07	8.853E-08	3.672E-08	1.155E-08	4.981E-09	2.847E-09	1.859E-09
NNE	9.290E-06	1.838E-06	5.084E-07	2.428E-07	1.449E-07	6.009E-08	1.890E-08	8.164E-09	4.677E-09	3.060E-09
NE	1.022E-05	2.021E-06	5.568E-07	2.651E-07	1.578E-07	6.508E-08	2.028E-08	8.688E-09	4.948E-09	3.221E-09
ENE	1.243E-05	2.465E-06	6.852E-07	3.284E-07	1.965E-07	8.173E-08	2.583E-08	1.117E-08	6.396E-09	4.176E-09
E	1.194E-05	2.368E-06	6.625E-07	3.192E-07	1.918E-07	8.039E-08	2.575E-08	1.126E-08	6.485E-09	4.253E-09
ESE	1.531E-05	3.045E-06	8.586E-07	4.161E-07	2.512E-07	1.061E-07	3.448E-08	1.526E-08	8.864E-09	5.850E-09
SE	1.010E-05	2.005E-06	5.609E-07	2.702E-07	1.624E-07	6.806E-08	2.180E-08	9.535E-09	5.496E-09	3.607E-09
SSE	7.479E-06	1.482E-06	4.124E-07	1.979E-07	1.185E-07	4.946E-08	1.573E-08	6.855E-09	3.946E-09	2.589E-09

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Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	DISTANCES IN MILES										
S	1.082E-07	3.660E-08	1.879E-08	8.934E-09	3.209E-09	1.591E-09	9.371E-10	6.136E-10	4.318E-10	3.200E-10	2.466E-10
SSW	9.010E-08	3.047E-08	1.564E-08	7.437E-09	2.672E-09	1.325E-09	7.801E-10	5.108E-10	3.594E-10	2.664E-10	2.053E-10
SW	1.068E-07	3.610E-08	1.854E-08	8.812E-09	3.165E-09	1.570E-09	9.243E-10	6.052E-10	4.259E-10	3.156E-10	2.432E-10
WSW	9.838E-08	3.327E-08	1.708E-08	8.121E-09	2.917E-09	1.447E-09	8.518E-10	5.578E-10	3.925E-10	2.909E-10	2.241E-10
W	1.086E-07	3.673E-08	1.886E-08	8.965E-09	3.220E-09	1.597E-09	9.403E-10	6.157E-10	4.332E-10	3.211E-10	2.474E-10
WNW	1.294E-07	4.375E-08	2.246E-08	1.068E-08	3.836E-09	1.902E-09	1.120E-09	7.334E-10	5.161E-10	3.825E-10	2.947E-10
NW	1.236E-07	4.181E-08	2.147E-08	1.021E-08	3.666E-09	1.818E-09	1.070E-09	7.009E-10	4.932E-10	3.655E-10	2.817E-10
NNW	1.106E-07	3.740E-08	1.920E-08	9.129E-09	3.279E-09	1.626E-09	9.575E-10	6.270E-10	4.412E-10	3.269E-10	2.520E-10
N	1.278E-07	4.323E-08	2.220E-08	1.055E-08	3.791E-09	1.880E-09	1.107E-09	7.248E-10	5.100E-10	3.780E-10	2.913E-10
NNE	2.436E-07	8.237E-08	4.229E-08	2.011E-08	7.222E-09	3.582E-09	2.109E-09	1.381E-09	9.716E-10	7.201E-10	5.549E-10
NE	2.457E-07	8.310E-08	4.267E-08	2.029E-08	7.286E-09	3.614E-09	2.128E-09	1.393E-09	9.803E-10	7.265E-10	5.599E-10
ENE	1.980E-07	6.694E-08	3.437E-08	1.634E-08	5.870E-09	2.911E-09	1.714E-09	1.122E-09	7.897E-10	5.853E-10	4.510E-10
E	1.602E-07	5.417E-08	2.781E-08	1.322E-08	4.749E-09	2.355E-09	1.387E-09	9.081E-10	6.390E-10	4.735E-10	3.649E-10
ESE	1.817E-07	6.145E-08	3.155E-08	1.500E-08	5.388E-09	2.672E-09	1.573E-09	1.030E-09	7.250E-10	5.373E-10	4.140E-10
SE	1.488E-07	5.033E-08	2.584E-08	1.229E-08	4.413E-09	2.189E-09	1.289E-09	8.438E-10	5.938E-10	4.400E-10	3.391E-10
SSE	1.345E-07	4.547E-08	2.335E-08	1.110E-08	3.987E-09	1.977E-09	1.164E-09	7.623E-10	5.364E-10	3.975E-10	3.063E-10

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
	DISTANCES IN MILES										
S	1.959E-10	8.702E-11	5.271E-11	2.664E-11	1.613E-11	1.081E-11	7.748E-12	5.818E-12	4.523E-12	3.613E-12	2.949E-12
SSW	1.631E-10	7.244E-11	4.388E-11	2.218E-11	1.343E-11	9.001E-12	6.450E-12	4.843E-12	3.766E-12	3.008E-12	2.455E-12
SW	1.932E-10	8.583E-11	5.199E-11	2.628E-11	1.591E-11	1.066E-11	7.642E-12	5.738E-12	4.462E-12	3.564E-12	2.909E-12
WSW	1.781E-10	7.910E-11	4.792E-11	2.422E-11	1.466E-11	9.828E-12	7.042E-12	5.288E-12	4.112E-12	3.284E-12	2.681E-12
W	1.966E-10	8.732E-11	5.289E-11	2.674E-11	1.618E-11	1.085E-11	7.774E-12	5.838E-12	4.539E-12	3.626E-12	2.959E-12
WNW	2.342E-10	1.040E-10	6.301E-11	3.185E-11	1.928E-11	1.292E-11	9.261E-12	6.954E-12	5.407E-12	4.319E-12	3.525E-12
NW	2.238E-10	9.941E-11	6.022E-11	3.044E-11	1.842E-11	1.235E-11	8.850E-12	6.646E-12	5.167E-12	4.128E-12	3.369E-12
NNW	2.002E-10	8.892E-11	5.386E-11	2.723E-11	1.648E-11	1.105E-11	7.917E-12	5.944E-12	4.622E-12	3.692E-12	3.014E-12
N	2.314E-10	1.028E-10	6.227E-11	3.147E-11	1.905E-11	1.277E-11	9.152E-12	6.872E-12	5.343E-12	4.268E-12	3.484E-12
NNE	4.408E-10	1.958E-10	1.186E-10	5.996E-11	3.629E-11	2.433E-11	1.744E-11	1.309E-11	1.018E-11	8.132E-12	6.637E-12
NE	4.448E-10	1.976E-10	1.197E-10	6.050E-11	3.662E-11	2.455E-11	1.759E-11	1.321E-11	1.027E-11	8.204E-12	6.696E-12
ENE	3.583E-10	1.592E-10	9.642E-11	4.873E-11	2.950E-11	1.978E-11	1.417E-11	1.064E-11	8.274E-12	6.609E-12	5.394E-12
E	2.899E-10	1.288E-10	7.801E-11	3.943E-11	2.387E-11	1.600E-11	1.147E-11	8.610E-12	6.694E-12	5.347E-12	4.365E-12
ESE	3.289E-10	1.461E-10	8.851E-11	4.474E-11	2.708E-11	1.815E-11	1.301E-11	9.768E-12	7.595E-12	6.067E-12	4.952E-12
SE	2.694E-10	1.197E-10	7.249E-11	3.664E-11	2.218E-11	1.487E-11	1.065E-11	8.001E-12	6.221E-12	4.969E-12	4.056E-12
SSE	2.434E-10	1.081E-10	6.549E-11	3.310E-11	2.003E-11	1.343E-11	9.625E-12	7.227E-12	5.619E-12	4.489E-12	3.664E-12

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Fermi COL A (using distances from RW Vent Stack)

Ground Level/Radwaste Bldg

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES									
S	1.837E-08	3.762E-09	9.822E-10	4.411E-10	2.496E-10	9.597E-11	2.776E-11	1.100E-11	5.876E-12	3.637E-12
SSW	1.529E-08	3.132E-09	8.177E-10	3.672E-10	2.077E-10	7.989E-11	2.311E-11	9.160E-12	4.892E-12	3.028E-12
SW	1.812E-08	3.711E-09	9.688E-10	4.351E-10	2.461E-10	9.466E-11	2.738E-11	1.085E-11	5.796E-12	3.587E-12
WSW	1.670E-08	3.420E-09	8.928E-10	4.010E-10	2.268E-10	8.723E-11	2.524E-11	1.000E-11	5.341E-12	3.306E-12
W	1.843E-08	3.775E-09	9.856E-10	4.426E-10	2.504E-10	9.630E-11	2.786E-11	1.104E-11	5.896E-12	3.649E-12
WNW	2.196E-08	4.497E-09	1.174E-09	5.273E-10	2.983E-10	1.147E-10	3.319E-11	1.315E-11	7.024E-12	4.347E-12
NW	2.098E-08	4.298E-09	1.122E-09	5.039E-10	2.851E-10	1.096E-10	3.171E-11	1.257E-11	6.712E-12	4.155E-12
NNW	1.877E-08	3.844E-09	1.004E-09	4.507E-10	2.550E-10	9.806E-11	2.837E-11	1.124E-11	6.004E-12	3.716E-12
N	2.170E-08	4.444E-09	1.160E-09	5.211E-10	2.948E-10	1.134E-10	3.279E-11	1.300E-11	6.941E-12	4.296E-12
NNE	4.134E-08	8.467E-09	2.210E-09	9.927E-10	5.616E-10	2.160E-10	6.248E-11	2.476E-11	1.322E-11	8.185E-12

NE	4.171E-08	8.543E-09	2.230E-09	1.002E-09	5.666E-10	2.179E-10	6.304E-11	2.498E-11	1.334E-11	8.258E-12
ENE	3.360E-08	6.882E-09	1.797E-09	8.069E-10	4.564E-10	1.755E-10	5.078E-11	2.013E-11	1.075E-11	6.652E-12
E	2.718E-08	5.568E-09	1.454E-09	6.528E-10	3.693E-10	1.420E-10	4.109E-11	1.628E-11	8.696E-12	5.382E-12
ESE	3.084E-08	6.317E-09	1.649E-09	7.407E-10	4.190E-10	1.611E-10	4.662E-11	1.848E-11	9.866E-12	6.107E-12
SE	2.526E-08	5.174E-09	1.351E-09	6.067E-10	3.432E-10	1.320E-10	3.818E-11	1.513E-11	8.081E-12	5.002E-12
SSE	2.282E-08	4.674E-09	1.220E-09	5.480E-10	3.100E-10	1.192E-10	3.449E-11	1.367E-11	7.300E-12	4.518E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

0Fermi COL A (using distances from RW Vent Stack)

0Ground Level/Radwaste Bldg
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3)	X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
		NO DECAY		2.260 DAY DECAY		8.000 DAY DECAY	
+							
+							
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Site Boundary	S	.74	6.1E-06	6.1E-06	5.4E-06	1.9E-08
	Site Boundary	SSW	.76	4.2E-06	4.2E-06	3.7E-06	1.5E-08
	Site Boundary	SW	.93	2.0E-06	2.0E-06	1.8E-06	1.1E-08
	Site Boundary	WSW	.71	2.9E-06	2.9E-06	2.6E-06	1.9E-08
	Site Boundary	W	.57	4.6E-06	4.6E-06	4.2E-06	3.0E-08
	Site Boundary	WNW	.54	7.0E-06	7.0E-06	6.3E-06	3.9E-08
	Site Boundary	NW	.53	7.6E-06	7.5E-06	6.9E-06	3.9E-08
	Site Boundary	NNW	.53	8.4E-06	8.3E-06	7.6E-06	3.5E-08
	Site Boundary	N	.61	9.2E-06	9.1E-06	8.3E-06	3.2E-08
	Site Boundary	NNE	.88	6.9E-06	6.8E-06	6.1E-06	2.8E-08
	Site Boundary	NE	1.22	3.3E-06	3.3E-06	2.9E-06	1.2E-08
	Site Boundary	SSE	.74	8.5E-06	8.5E-06	7.6E-06	2.4E-08
	Residence	SSE	.96	4.4E-06	4.4E-06	3.9E-06	1.2E-08
	Residence	SSW	.93	2.4E-06	2.4E-06	2.1E-06	8.9E-09
	Residence	SW	1.03	1.6E-06	1.5E-06	1.4E-06	8.2E-09
	Residence	WSW	1.04	1.1E-06	1.1E-06	9.6E-07	7.3E-09
	Residence	W	.96	1.5E-06	1.5E-06	1.3E-06	1.0E-08
	Residence	NW	.64	5.3E-06	5.2E-06	4.7E-06	2.8E-08
	Residence	NW	1.02	1.8E-06	1.8E-06	1.6E-06	9.7E-09
	Residence	NNW	1.15	1.5E-06	1.5E-06	1.3E-06	6.4E-09
	Residence	NNE	1.25	2.8E-06	2.8E-06	2.4E-06	1.1E-08
	Residence	NNE	1.18	3.3E-06	3.2E-06	2.8E-06	1.3E-08
	Residence	NE	1.30	2.9E-06	2.8E-06	2.5E-06	1.0E-08
	Garden	S	1.32	1.4E-06	1.4E-06	1.2E-06	4.4E-09
	Garden	WSW	2.05	2.2E-07	2.2E-07	1.8E-07	1.4E-09
	Garden	W	1.49	5.1E-07	5.0E-07	4.3E-07	3.3E-09
	Garden	NW	.64	5.2E-06	5.2E-06	4.7E-06	2.8E-08
	Garden	NNW	1.02	2.0E-06	2.0E-06	1.8E-06	8.7E-09
	Garden	NNW	1.41	9.1E-07	9.1E-07	7.8E-07	3.8E-09
	Garden	N	2.26	4.6E-07	4.5E-07	3.7E-07	1.4E-09
	Garden	NNE	2.09	8.9E-07	8.8E-07	7.3E-07	3.2E-09
	Garden	NE	2.18	8.8E-07	8.7E-07	7.2E-07	2.9E-09
	Sheep	NNW	4.41	8.6E-08	8.4E-08	6.5E-08	2.6E-10
	Sheep	NNE	4.42	2.0E-07	1.9E-07	1.5E-07	5.8E-10
	Goat	WNW	2.27	2.7E-07	2.7E-07	2.2E-07	1.4E-09

Goat	NNW	3.04	1.8E-07	1.7E-07	1.4E-07	6.1E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.382E-07	2.844E-07	1.768E-07	9.884E-08	6.658E-08	4.903E-08	3.816E-08	3.086E-08	2.568E-08	2.185E-08
SSW	8.151E-07	3.275E-07	2.251E-07	1.505E-07	9.004E-08	6.174E-08	4.547E-08	3.517E-08	2.821E-08	2.328E-08	1.964E-08
SW	1.150E-06	4.523E-07	3.164E-07	2.102E-07	1.178E-07	7.642E-08	5.404E-08	4.055E-08	3.177E-08	2.573E-08	2.137E-08
WSW	1.211E-06	4.644E-07	3.042E-07	1.915E-07	1.008E-07	6.333E-08	4.395E-08	3.258E-08	2.531E-08	2.037E-08	1.704E-08
W	1.611E-06	5.708E-07	3.582E-07	2.179E-07	1.104E-07	6.829E-08	4.710E-08	3.483E-08	2.704E-08	2.177E-08	1.802E-08
WNW	1.858E-06	6.257E-07	3.782E-07	2.329E-07	1.219E-07	7.696E-08	5.378E-08	4.016E-08	3.143E-08	2.547E-08	2.120E-08
NW	1.820E-06	6.145E-07	3.538E-07	2.100E-07	1.090E-07	6.904E-08	4.851E-08	3.643E-08	2.866E-08	2.334E-08	1.962E-08
NNW	1.706E-06	5.681E-07	3.227E-07	1.889E-07	9.915E-08	6.416E-08	4.598E-08	3.511E-08	2.801E-08	2.307E-08	1.973E-08
N	1.751E-06	6.179E-07	3.761E-07	2.313E-07	1.278E-07	8.509E-08	6.201E-08	4.785E-08	3.843E-08	3.180E-08	2.711E-08
NNE	3.590E-06	1.280E-06	7.693E-07	4.495E-07	2.328E-07	1.499E-07	1.071E-07	8.168E-08	6.684E-08	5.634E-08	4.769E-08
NE	2.374E-06	9.402E-07	6.270E-07	3.986E-07	2.256E-07	1.507E-07	1.096E-07	8.423E-08	6.739E-08	5.555E-08	4.688E-08
ENE	1.358E-06	5.324E-07	3.603E-07	2.487E-07	1.630E-07	1.185E-07	9.085E-08	7.241E-08	5.948E-08	5.004E-08	4.292E-08
E	1.061E-06	4.341E-07	2.860E-07	1.909E-07	1.219E-07	8.829E-08	6.794E-08	5.446E-08	4.501E-08	3.809E-08	3.285E-08
ESE	1.198E-06	4.623E-07	2.929E-07	1.918E-07	1.215E-07	8.832E-08	6.843E-08	5.527E-08	4.601E-08	3.921E-08	3.403E-08
SE	1.041E-06	3.935E-07	2.490E-07	1.666E-07	1.086E-07	7.944E-08	6.137E-08	4.927E-08	4.074E-08	3.447E-08	2.972E-08
SSE	1.131E-06	4.349E-07	2.828E-07	1.840E-07	1.110E-07	7.726E-08	5.778E-08	4.534E-08	3.685E-08	3.077E-08	2.625E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.893E-08	1.162E-08	8.383E-09	5.506E-09	4.086E-09	3.244E-09	2.690E-09	2.297E-09	2.003E-09	1.774E-09	1.589E-09
SSW	1.688E-08	9.925E-09	6.920E-09	4.318E-09	3.080E-09	2.368E-09	1.911E-09	1.594E-09	1.363E-09	1.188E-09	1.050E-09
SW	1.813E-08	1.012E-08	6.827E-09	4.078E-09	2.823E-09	2.121E-09	1.679E-09	1.378E-09	1.162E-09	9.993E-10	8.736E-10
WSW	1.456E-08	8.083E-09	5.453E-09	3.268E-09	2.271E-09	1.711E-09	1.357E-09	1.114E-09	9.383E-10	8.054E-10	7.015E-10
W	1.525E-08	8.841E-09	6.167E-09	3.874E-09	2.754E-09	2.073E-09	1.625E-09	1.322E-09	1.106E-09	9.460E-10	8.228E-10
WNW	1.803E-08	1.092E-08	7.906E-09	5.267E-09	3.845E-09	2.897E-09	2.281E-09	1.865E-09	1.567E-09	1.345E-09	1.174E-09
NW	1.685E-08	1.020E-08	7.395E-09	4.977E-09	3.757E-09	2.976E-09	2.408E-09	1.984E-09	1.676E-09	1.444E-09	1.264E-09
NNW	1.720E-08	1.103E-08	8.292E-09	5.771E-09	4.349E-09	3.360E-09	2.666E-09	2.186E-09	1.842E-09	1.585E-09	1.385E-09
N	2.354E-08	1.489E-08	1.100E-08	7.457E-09	5.597E-09	4.399E-09	3.534E-09	2.895E-09	2.433E-09	2.087E-09	1.820E-09
NNE	4.117E-08	2.404E-08	1.678E-08	1.053E-08	7.545E-09	5.821E-09	4.707E-09	3.934E-09	3.368E-09	2.938E-09	2.600E-09
NE	4.033E-08	2.375E-08	1.663E-08	1.047E-08	7.522E-09	5.817E-09	4.716E-09	3.951E-09	3.392E-09	2.966E-09	2.632E-09
ENE	3.742E-08	2.309E-08	1.664E-08	1.086E-08	8.000E-09	6.308E-09	5.200E-09	4.420E-09	3.844E-09	3.402E-09	3.052E-09
E	2.879E-08	1.789E-08	1.293E-08	8.455E-09	6.210E-09	4.869E-09	3.984E-09	3.359E-09	2.896E-09	2.539E-09	2.257E-09
ESE	3.001E-08	1.924E-08	1.426E-08	9.683E-09	7.321E-09	5.880E-09	4.912E-09	4.219E-09	3.698E-09	3.293E-09	2.970E-09
SE	2.604E-08	1.630E-08	1.186E-08	7.845E-09	5.827E-09	4.622E-09	3.827E-09	3.264E-09	2.847E-09	2.525E-09	2.270E-09
SSE	2.279E-08	1.437E-08	1.062E-08	7.307E-09	5.661E-09	4.666E-09	3.987E-09	3.480E-09	3.074E-09	2.733E-09	2.438E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6

DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.707E-07	1.018E-07	4.936E-08	3.097E-08	2.190E-08	1.181E-08	5.514E-09	3.247E-09	2.298E-09	1.773E-09
SSW	2.147E-07	9.090E-08	4.569E-08	2.832E-08	1.970E-08	1.014E-08	4.346E-09	2.375E-09	1.597E-09	1.189E-09
SW	2.994E-07	1.200E-07	5.461E-08	3.198E-08	2.146E-08	1.044E-08	4.131E-09	2.131E-09	1.381E-09	1.001E-09
WSW	2.897E-07	1.043E-07	4.457E-08	2.550E-08	1.711E-08	8.353E-09	3.311E-09	1.719E-09	1.117E-09	8.063E-10
W	3.431E-07	1.156E-07	4.784E-08	2.726E-08	1.810E-08	9.076E-09	3.886E-09	2.075E-09	1.326E-09	9.479E-10
WNW	3.686E-07	1.266E-07	5.451E-08	3.165E-08	2.129E-08	1.116E-08	5.221E-09	2.904E-09	1.871E-09	1.348E-09
NW	3.478E-07	1.137E-07	4.915E-08	2.886E-08	1.969E-08	1.043E-08	4.972E-09	2.957E-09	1.988E-09	1.446E-09
NNW	3.178E-07	1.035E-07	4.648E-08	2.816E-08	1.978E-08	1.119E-08	5.699E-09	3.346E-09	2.192E-09	1.587E-09
N	3.655E-07	1.318E-07	6.250E-08	3.859E-08	2.718E-08	1.508E-08	7.417E-09	4.373E-09	2.902E-09	2.091E-09
NNE	7.406E-07	2.441E-07	1.083E-07	6.708E-08	4.784E-08	2.462E-08	1.059E-08	5.835E-09	3.939E-09	2.940E-09
NE	5.951E-07	2.307E-07	1.104E-07	6.769E-08	4.702E-08	2.427E-08	1.053E-08	5.831E-09	3.957E-09	2.969E-09
ENE	3.489E-07	1.623E-07	9.085E-08	5.958E-08	4.299E-08	2.340E-08	1.087E-08	6.316E-09	4.423E-09	3.403E-09
E	2.766E-07	1.223E-07	6.797E-08	4.507E-08	3.290E-08	1.811E-08	8.453E-09	4.873E-09	3.361E-09	2.540E-09
ESE	2.856E-07	1.224E-07	6.847E-08	4.606E-08	3.408E-08	1.942E-08	9.650E-09	5.877E-09	4.219E-09	3.293E-09
SE	2.445E-07	1.085E-07	6.135E-08	4.079E-08	2.976E-08	1.649E-08	7.840E-09	4.626E-09	3.266E-09	2.526E-09
SSE	2.727E-07	1.122E-07	5.800E-08	3.696E-08	2.631E-08	1.457E-08	7.311E-09	4.660E-09	3.470E-09	2.725E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.036E+01	8.038E+01	8.038E+01	8.038E+01	8.038E+01	7.732E+01	6.927E+01	5.972E+01	4.991E+01	4.002E+01
SSW	8.001E+01	7.962E+01	7.962E+01	7.962E+01	7.962E+01	7.724E+01	7.098E+01	6.355E+01	5.592E+01	4.822E+01
SW	7.822E+01	7.753E+01	7.753E+01	7.753E+01	7.753E+01	7.529E+01	6.938E+01	6.237E+01	5.518E+01	4.792E+01
WSW	7.486E+01	7.396E+01	7.396E+01	7.396E+01	7.236E+01	6.690E+01	5.618E+01	4.345E+01	3.039E+01	1.736E+01
W	6.955E+01	6.828E+01	6.828E+01	6.828E+01	6.828E+01	5.855E+01	3.289E+01	8.608E+00	1.732E+00	1.215E+00
WNW	7.213E+01	7.063E+01	7.063E+01	7.063E+01	7.063E+01	5.936E+01	2.968E+01	5.985E+00	1.163E+00	7.944E-01
NW	7.673E+01	7.559E+01	7.559E+01	7.559E+01	7.505E+01	6.692E+01	4.669E+01	2.292E+01	7.056E+00	3.422E+00
NNW	7.613E+01	7.527E+01	7.527E+01	7.527E+01	7.420E+01	6.296E+01	3.577E+01	9.883E+00	2.262E+00	1.598E+00
N	7.721E+01	7.658E+01	7.658E+01	7.658E+01	7.604E+01	6.716E+01	4.497E+01	1.940E+01	4.926E+00	2.492E+00
NNE	7.694E+01	7.706E+01	7.706E+01	7.488E+01	7.253E+01	7.091E+01	6.787E+01	6.427E+01	6.056E+01	5.683E+01
NE	7.865E+01	7.873E+01	7.873E+01	7.873E+01	7.873E+01	7.724E+01	7.331E+01	6.864E+01	6.384E+01	5.901E+01
ENE	8.373E+01	8.378E+01	8.378E+01	8.378E+01	8.378E+01	8.229E+01	7.835E+01	7.368E+01	6.889E+01	6.405E+01
E	8.632E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01
ESE	8.399E+01	8.402E+01	8.402E+01	8.402E+01	8.402E+01	8.355E+01	8.229E+01	8.081E+01	7.928E+01	7.774E+01
SE	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.324E+01	8.074E+01	7.776E+01	7.471E+01	7.163E+01
SSE	8.240E+01	8.240E+01	8.240E+01	8.240E+01	8.240E+01	7.778E+01	6.561E+01	5.117E+01	3.634E+01	2.144E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.379E-07	2.840E-07	1.765E-07	9.860E-08	6.635E-08	4.881E-08	3.795E-08	3.065E-08	2.548E-08	2.165E-08
SSW	8.148E-07	3.272E-07	2.248E-07	1.503E-07	8.982E-08	6.153E-08	4.527E-08	3.498E-08	2.803E-08	2.311E-08	1.948E-08
SW	1.150E-06	4.518E-07	3.159E-07	2.099E-07	1.175E-07	7.616E-08	5.381E-08	4.034E-08	3.157E-08	2.554E-08	2.119E-08
WSW	1.210E-06	4.640E-07	3.038E-07	1.912E-07	1.006E-07	6.314E-08	4.377E-08	3.241E-08	2.516E-08	2.022E-08	1.690E-08
W	1.610E-06	5.704E-07	3.578E-07	2.176E-07	1.101E-07	6.809E-08	4.691E-08	3.466E-08	2.688E-08	2.162E-08	1.787E-08
WNW	1.857E-06	6.252E-07	3.778E-07	2.325E-07	1.216E-07	7.672E-08	5.357E-08	3.997E-08	3.126E-08	2.531E-08	2.104E-08
NW	1.819E-06	6.139E-07	3.533E-07	2.096E-07	1.087E-07	6.878E-08	4.828E-08	3.622E-08	2.847E-08	2.316E-08	1.944E-08
NNW	1.705E-06	5.676E-07	3.222E-07	1.885E-07	9.889E-08	6.393E-08	4.577E-08	3.492E-08	2.783E-08	2.290E-08	1.956E-08
N	1.750E-06	6.173E-07	3.755E-07	2.308E-07	1.275E-07	8.476E-08	6.170E-08	4.755E-08	3.814E-08	3.152E-08	2.684E-08
NNE	3.589E-06	1.279E-06	7.684E-07	4.488E-07	2.323E-07	1.494E-07	1.067E-07	8.125E-08	6.642E-08	5.593E-08	4.729E-08
NE	2.373E-06	9.395E-07	6.263E-07	3.980E-07	2.250E-07	1.502E-07	1.091E-07	8.379E-08	6.697E-08	5.515E-08	4.649E-08
ENE	1.357E-06	5.319E-07	3.599E-07	2.482E-07	1.625E-07	1.180E-07	9.038E-08	7.195E-08	5.903E-08	4.959E-08	4.248E-08
E	1.061E-06	4.337E-07	2.855E-07	1.906E-07	1.215E-07	8.791E-08	6.756E-08	5.408E-08	4.463E-08	3.771E-08	3.248E-08
ESE	1.197E-06	4.619E-07	2.925E-07	1.915E-07	1.211E-07	8.797E-08	6.807E-08	5.490E-08	4.565E-08	3.884E-08	3.367E-08
SE	1.040E-06	3.931E-07	2.487E-07	1.663E-07	1.083E-07	7.912E-08	6.105E-08	4.895E-08	4.042E-08	3.416E-08	2.941E-08
SSE	1.130E-06	4.345E-07	2.825E-07	1.837E-07	1.107E-07	7.698E-08	5.751E-08	4.507E-08	3.659E-08	3.052E-08	2.600E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.874E-08	1.144E-08	8.203E-09	5.324E-09	3.904E-09	3.064E-09	2.511E-09	2.119E-09	1.827E-09	1.599E-09	1.416E-09
SSW	1.672E-08	9.781E-09	6.784E-09	4.188E-09	2.955E-09	2.247E-09	1.793E-09	1.480E-09	1.252E-09	1.078E-09	9.428E-10
SW	1.796E-08	9.967E-09	6.686E-09	3.947E-09	2.700E-09	2.004E-09	1.567E-09	1.271E-09	1.059E-09	9.000E-10	7.775E-10
WSW	1.442E-08	7.964E-09	5.342E-09	3.164E-09	2.173E-09	1.617E-09	1.267E-09	1.028E-09	8.554E-10	7.257E-10	6.249E-10
W	1.511E-08	8.716E-09	6.047E-09	3.759E-09	2.644E-09	1.969E-09	1.527E-09	1.230E-09	1.019E-09	8.631E-10	7.435E-10
WNW	1.789E-08	1.078E-08	7.767E-09	5.121E-09	3.699E-09	2.758E-09	2.150E-09	1.740E-09	1.448E-09	1.231E-09	1.064E-09
NW	1.668E-08	1.004E-08	7.238E-09	4.814E-09	3.589E-09	2.809E-09	2.244E-09	1.827E-09	1.524E-09	1.298E-09	1.124E-09
NNW	1.703E-08	1.087E-08	8.116E-09	5.577E-09	4.146E-09	3.157E-09	2.471E-09	2.002E-09	1.666E-09	1.416E-09	1.224E-09
N	2.328E-08	1.462E-08	1.072E-08	7.169E-09	5.304E-09	4.110E-09	3.255E-09	2.630E-09	2.180E-09	1.846E-09	1.589E-09
NNE	4.078E-08	2.368E-08	1.644E-08	1.020E-08	7.226E-09	5.510E-09	4.406E-09	3.641E-09	3.083E-09	2.659E-09	2.328E-09
NE	3.995E-08	2.340E-08	1.629E-08	1.013E-08	7.193E-09	5.494E-09	4.399E-09	3.640E-09	3.086E-09	2.665E-09	2.335E-09
ENE	3.699E-08	2.267E-08	1.622E-08	1.044E-08	7.581E-09	5.892E-09	4.786E-09	4.009E-09	3.436E-09	2.997E-09	2.650E-09
E	2.843E-08	1.753E-08	1.258E-08	8.097E-09	5.855E-09	4.520E-09	3.641E-09	3.022E-09	2.565E-09	2.215E-09	1.939E-09
ESE	2.965E-08	1.887E-08	1.389E-08	9.299E-09	6.930E-09	5.486E-09	4.517E-09	3.824E-09	3.304E-09	2.901E-09	2.578E-09
SE	2.573E-08	1.600E-08	1.156E-08	7.541E-09	5.523E-09	4.320E-09	3.526E-09	2.965E-09	2.549E-09	2.229E-09	1.976E-09
SSE	2.255E-08	1.413E-08	1.037E-08	7.039E-09	5.378E-09	4.372E-09	3.684E-09	3.171E-09	2.763E-09	2.424E-09	2.133E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.704E-07	1.016E-07	4.914E-08	3.077E-08	2.171E-08	1.162E-08	5.333E-09	3.067E-09	2.120E-09	1.599E-09
SSW	2.144E-07	9.068E-08	4.549E-08	2.814E-08	1.953E-08	9.992E-09	4.217E-09	2.255E-09	1.483E-09	1.080E-09
SW	2.990E-07	1.197E-07	5.438E-08	3.178E-08	2.128E-08	1.028E-08	4.001E-09	2.015E-09	1.275E-09	9.016E-10
WSW	2.894E-07	1.041E-07	4.439E-08	2.535E-08	1.697E-08	8.234E-09	3.207E-09	1.625E-09	1.030E-09	7.268E-10
W	3.428E-07	1.153E-07	4.766E-08	2.710E-08	1.796E-08	8.952E-09	3.772E-09	1.972E-09	1.235E-09	8.651E-10
WNW	3.682E-07	1.263E-07	5.431E-08	3.148E-08	2.114E-08	1.102E-08	5.077E-09	2.766E-09	1.746E-09	1.234E-09
NW	3.473E-07	1.134E-07	4.893E-08	2.866E-08	1.952E-08	1.027E-08	4.808E-09	2.791E-09	1.831E-09	1.301E-09
NNW	3.173E-07	1.033E-07	4.627E-08	2.798E-08	1.961E-08	1.101E-08	5.505E-09	3.146E-09	2.008E-09	1.419E-09
N	3.650E-07	1.315E-07	6.219E-08	3.831E-08	2.691E-08	1.481E-08	7.130E-09	4.086E-09	2.637E-09	1.850E-09
NNE	7.397E-07	2.435E-07	1.079E-07	6.666E-08	4.744E-08	2.426E-08	1.026E-08	5.526E-09	3.647E-09	2.662E-09
NE	5.944E-07	2.302E-07	1.099E-07	6.727E-08	4.663E-08	2.392E-08	1.020E-08	5.509E-09	3.646E-09	2.668E-09
ENE	3.485E-07	1.618E-07	9.038E-08	5.913E-08	4.256E-08	2.298E-08	1.045E-08	5.900E-09	4.013E-09	2.998E-09
E	2.763E-07	1.219E-07	6.759E-08	4.469E-08	3.253E-08	1.775E-08	8.096E-09	4.524E-09	3.025E-09	2.216E-09
ESE	2.852E-07	1.220E-07	6.811E-08	4.570E-08	3.372E-08	1.905E-08	9.266E-09	5.483E-09	3.824E-09	2.901E-09
SE	2.442E-07	1.082E-07	6.103E-08	4.047E-08	2.946E-08	1.619E-08	7.538E-09	4.323E-09	2.967E-09	2.230E-09
SSE	2.724E-07	1.119E-07	5.773E-08	3.670E-08	2.606E-08	1.433E-08	7.041E-09	4.365E-09	3.163E-09	2.417E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.074E-06	4.091E-07	2.636E-07	1.641E-07	9.204E-08	6.201E-08	4.561E-08	3.542E-08	2.858E-08	2.373E-08	2.014E-08
SSW	7.794E-07	3.066E-07	2.101E-07	1.413E-07	8.495E-08	5.823E-08	4.278E-08	3.298E-08	2.637E-08	2.169E-08	1.824E-08
SW	1.102E-06	4.235E-07	2.957E-07	1.975E-07	1.106E-07	7.142E-08	5.022E-08	3.747E-08	2.919E-08	2.351E-08	1.943E-08
WSW	1.161E-06	4.354E-07	2.837E-07	1.789E-07	9.393E-08	5.867E-08	4.046E-08	2.980E-08	2.301E-08	1.841E-08	1.534E-08
W	1.542E-06	5.323E-07	3.314E-07	2.015E-07	1.016E-07	6.250E-08	4.283E-08	3.148E-08	2.431E-08	1.946E-08	1.602E-08
WNW	1.788E-06	5.871E-07	3.514E-07	2.164E-07	1.130E-07	7.097E-08	4.933E-08	3.665E-08	2.854E-08	2.301E-08	1.907E-08
NW	1.756E-06	5.797E-07	3.296E-07	1.950E-07	1.009E-07	6.357E-08	4.444E-08	3.321E-08	2.601E-08	2.108E-08	1.765E-08
NNW	1.640E-06	5.327E-07	2.981E-07	1.742E-07	9.145E-08	5.909E-08	4.226E-08	3.219E-08	2.561E-08	2.104E-08	1.797E-08
N	1.678E-06	5.768E-07	3.469E-07	2.137E-07	1.186E-07	7.905E-08	5.757E-08	4.436E-08	3.557E-08	2.937E-08	2.501E-08
NNE	3.426E-06	1.188E-06	7.048E-07	4.110E-07	2.130E-07	1.370E-07	9.783E-08	7.443E-08	6.091E-08	5.134E-08	4.338E-08
NE	2.268E-06	8.786E-07	5.833E-07	3.719E-07	2.111E-07	1.408E-07	1.021E-07	7.830E-08	6.246E-08	5.134E-08	4.320E-08
ENE	1.308E-06	5.028E-07	3.390E-07	2.354E-07	1.554E-07	1.130E-07	8.652E-08	6.882E-08	5.639E-08	4.733E-08	4.050E-08
E	1.026E-06	4.133E-07	2.704E-07	1.811E-07	1.162E-07	8.420E-08	6.471E-08	5.177E-08	4.269E-08	3.604E-08	3.101E-08
ESE	1.160E-06	4.399E-07	2.764E-07	1.815E-07	1.156E-07	8.416E-08	6.518E-08	5.258E-08	4.371E-08	3.719E-08	3.223E-08
SE	1.009E-06	3.745E-07	2.351E-07	1.580E-07	1.036E-07	7.589E-08	5.857E-08	4.694E-08	3.874E-08	3.271E-08	2.814E-08
SSE	1.087E-06	4.098E-07	2.648E-07	1.729E-07	1.048E-07	7.293E-08	5.444E-08	4.261E-08	3.454E-08	2.876E-08	2.446E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.741E-08	1.060E-08	7.594E-09	4.936E-09	3.634E-09	2.868E-09	2.364E-09	1.995E-09	1.699E-09	1.464E-09	1.275E-09
SSW	1.563E-08	9.073E-09	6.262E-09	3.845E-09	2.709E-09	2.061E-09	1.648E-09	1.362E-09	1.148E-09	9.813E-10	8.470E-10
SW	1.640E-08	8.970E-09	5.952E-09	3.461E-09	2.344E-09	1.729E-09	1.346E-09	1.086E-09	8.965E-10	7.530E-10	6.417E-10

WSW	1.305E-08	7.096E-09	4.705E-09	2.742E-09	1.852E-09	1.345E-09	1.025E-09	8.099E-10	6.576E-10	5.461E-10	4.616E-10
W	1.350E-08	7.715E-09	5.314E-09	3.204E-09	2.145E-09	1.543E-09	1.163E-09	9.132E-10	7.399E-10	6.138E-10	5.188E-10
WNW	1.615E-08	9.683E-09	6.950E-09	4.420E-09	3.040E-09	2.196E-09	1.665E-09	1.316E-09	1.071E-09	8.930E-10	7.580E-10
NW	1.511E-08	9.051E-09	6.505E-09	4.248E-09	3.022E-09	2.268E-09	1.763E-09	1.402E-09	1.145E-09	9.572E-10	8.142E-10
NNW	1.564E-08	1.001E-08	7.488E-09	5.010E-09	3.532E-09	2.606E-09	1.991E-09	1.577E-09	1.287E-09	1.074E-09	9.133E-10
N	2.168E-08	1.367E-08	1.005E-08	6.681E-09	4.726E-09	3.514E-09	2.711E-09	2.146E-09	1.747E-09	1.456E-09	1.235E-09
NNE	3.738E-08	2.163E-08	1.497E-08	9.258E-09	6.555E-09	5.003E-09	4.008E-09	3.317E-09	2.803E-09	2.415E-09	2.107E-09
NE	3.706E-08	2.159E-08	1.499E-08	9.305E-09	6.609E-09	5.062E-09	4.069E-09	3.381E-09	2.868E-09	2.481E-09	2.175E-09
ENE	3.523E-08	2.154E-08	1.541E-08	9.949E-09	7.261E-09	5.681E-09	4.651E-09	3.927E-09	3.378E-09	2.961E-09	2.626E-09
E	2.713E-08	1.670E-08	1.198E-08	7.732E-09	5.617E-09	4.361E-09	3.537E-09	2.956E-09	2.521E-09	2.190E-09	1.926E-09
ESE	2.838E-08	1.808E-08	1.333E-08	8.974E-09	6.734E-09	5.373E-09	4.461E-09	3.808E-09	3.303E-09	2.914E-09	2.599E-09
SE	2.461E-08	1.527E-08	1.104E-08	7.223E-09	5.317E-09	4.185E-09	3.441E-09	2.915E-09	2.514E-09	2.209E-09	1.964E-09
SSE	2.119E-08	1.325E-08	9.737E-09	6.651E-09	5.127E-09	4.193E-09	3.487E-09	2.933E-09	2.502E-09	2.153E-09	1.870E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.517E-07	9.471E-08	4.591E-08	2.869E-08	2.019E-08	1.078E-08	4.948E-09	2.871E-09	1.987E-09	1.463E-09
SSW	2.009E-07	8.559E-08	4.298E-08	2.648E-08	1.829E-08	9.280E-09	3.877E-09	2.069E-09	1.362E-09	9.810E-10
SW	2.804E-07	1.125E-07	5.077E-08	2.939E-08	1.952E-08	9.279E-09	3.518E-09	1.740E-09	1.088E-09	7.543E-10
WSW	2.708E-07	9.714E-08	4.105E-08	2.320E-08	1.540E-08	7.356E-09	2.783E-09	1.352E-09	8.134E-10	5.478E-10
W	3.183E-07	1.064E-07	4.354E-08	2.451E-08	1.611E-08	7.933E-09	3.202E-09	1.551E-09	9.184E-10	6.160E-10
WNW	3.438E-07	1.173E-07	5.003E-08	2.875E-08	1.916E-08	9.906E-09	4.369E-09	2.209E-09	1.322E-09	8.958E-10
NW	3.254E-07	1.052E-07	4.505E-08	2.619E-08	1.773E-08	9.265E-09	4.205E-09	2.267E-09	1.407E-09	9.600E-10
NNW	2.952E-07	9.547E-08	4.272E-08	2.575E-08	1.802E-08	1.014E-08	4.904E-09	2.607E-09	1.585E-09	1.078E-09
N	3.388E-07	1.222E-07	5.801E-08	3.572E-08	2.507E-08	1.384E-08	6.561E-09	3.516E-09	2.156E-09	1.460E-09
NNE	6.816E-07	2.232E-07	9.893E-08	6.113E-08	4.352E-08	2.217E-08	9.326E-09	5.019E-09	3.319E-09	2.416E-09
NE	5.550E-07	2.156E-07	1.029E-07	6.275E-08	4.334E-08	2.210E-08	9.370E-09	5.077E-09	3.382E-09	2.482E-09
ENE	3.294E-07	1.543E-07	8.651E-08	5.649E-08	4.057E-08	2.186E-08	9.968E-09	5.690E-09	3.924E-09	2.960E-09
E	2.625E-07	1.164E-07	6.473E-08	4.275E-08	3.106E-08	1.692E-08	7.736E-09	4.366E-09	2.957E-09	2.191E-09
ESE	2.706E-07	1.163E-07	6.520E-08	4.376E-08	3.228E-08	1.826E-08	8.946E-09	5.371E-09	3.802E-09	2.912E-09
SE	2.318E-07	1.034E-07	5.854E-08	3.879E-08	2.819E-08	1.547E-08	7.224E-09	4.190E-09	2.913E-09	2.209E-09
SSE	2.562E-07	1.058E-07	5.464E-08	3.464E-08	2.452E-08	1.345E-08	6.660E-09	4.160E-09	2.927E-09	2.151E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.787E-08	9.225E-09	5.746E-09	3.117E-09	1.271E-09	6.818E-10	4.230E-10	2.880E-10	2.087E-10	1.582E-10	1.240E-10
SSW	1.393E-08	7.387E-09	4.722E-09	2.618E-09	1.089E-09	5.924E-10	3.711E-10	2.542E-10	1.849E-10	1.405E-10	1.103E-10
SW	1.964E-08	1.080E-08	7.021E-09	3.896E-09	1.623E-09	8.739E-10	5.427E-10	3.696E-10	2.679E-10	2.030E-10	1.592E-10
WSW	2.364E-08	1.231E-08	7.566E-09	4.042E-09	1.629E-09	8.609E-10	5.284E-10	3.572E-10	2.576E-10	1.947E-10	1.525E-10
W	3.098E-08	1.498E-08	8.799E-09	4.683E-09	1.849E-09	9.621E-10	5.842E-10	3.919E-10	2.812E-10	2.117E-10	1.654E-10
WNW	3.293E-08	1.672E-08	9.777E-09	5.230E-09	2.037E-09	1.059E-09	6.436E-10	4.323E-10	3.106E-10	2.343E-10	1.833E-10
NW	3.046E-08	1.598E-08	9.347E-09	4.979E-09	1.912E-09	9.908E-10	6.017E-10	4.041E-10	2.904E-10	2.192E-10	1.716E-10
NNW	2.560E-08	1.298E-08	7.482E-09	3.797E-09	1.431E-09	7.439E-10	4.535E-10	3.056E-10	2.203E-10	1.667E-10	1.307E-10
N	2.409E-08	1.210E-08	7.197E-09	3.737E-09	1.441E-09	7.557E-10	4.630E-10	3.129E-10	2.258E-10	1.709E-10	1.340E-10
NNE	5.377E-08	2.552E-08	1.482E-08	7.640E-09	2.974E-09	1.553E-09	9.467E-10	6.371E-10	4.583E-10	3.458E-10	2.704E-10
NE	4.735E-08	2.442E-08	1.519E-08	8.230E-09	3.373E-09	1.800E-09	1.112E-09	7.543E-10	5.453E-10	4.126E-10	3.231E-10
ENE	2.780E-08	1.523E-08	9.593E-09	5.275E-09	2.177E-09	1.186E-09	7.448E-10	5.113E-10	3.726E-10	2.834E-10	2.227E-10
E	2.355E-08	1.315E-08	8.209E-09	4.450E-09	1.795E-09	9.714E-10	6.079E-10	4.167E-10	3.036E-10	2.310E-10	1.817E-10
ESE	2.561E-08	1.419E-08	8.748E-09	4.679E-09	1.858E-09	9.967E-10	6.202E-10	4.237E-10	3.080E-10	2.341E-10	1.841E-10
SE	2.179E-08	1.208E-08	7.441E-09	3.994E-09	1.593E-09	8.591E-10	5.366E-10	3.675E-10	2.676E-10	2.036E-10	1.601E-10
SSE	2.134E-08	1.151E-08	7.121E-09	3.854E-09	1.562E-09	8.443E-10	5.275E-10	3.611E-10	2.627E-10	1.997E-10	1.569E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.983E-11	4.609E-11	2.784E-11	1.455E-11	9.251E-12	6.712E-12	6.386E-12	7.975E-12	7.180E-12	6.172E-12	5.025E-12
SSW	8.879E-11	4.112E-11	2.486E-11	1.298E-11	8.222E-12	5.903E-12	4.814E-12	4.275E-12	4.384E-12	4.705E-12	3.992E-12
SW	1.281E-10	5.895E-11	3.579E-11	1.828E-11	1.153E-11	8.209E-12	6.467E-12	5.765E-12	5.760E-12	4.971E-12	4.160E-12
WSW	1.249E-10	5.693E-11	3.408E-11	1.919E-11	1.434E-11	1.209E-11	9.094E-12	6.965E-12	5.401E-12	4.384E-12	3.593E-12
W	1.329E-10	6.063E-11	4.049E-11	3.015E-11	1.944E-11	1.339E-11	9.759E-12	7.364E-12	5.728E-12	4.577E-12	3.737E-12
WNW	1.475E-10	6.847E-11	5.289E-11	3.789E-11	2.357E-11	1.625E-11	1.176E-11	8.835E-12	6.872E-12	5.496E-12	4.487E-12
NW	1.382E-10	6.369E-11	4.251E-11	3.621E-11	2.435E-11	1.598E-11	1.125E-11	8.486E-12	6.588E-12	5.266E-12	4.300E-12
NNW	1.079E-10	4.972E-11	3.510E-11	3.585E-11	2.210E-11	1.425E-11	1.024E-11	7.738E-12	6.021E-12	4.813E-12	3.926E-12
N	1.080E-10	5.087E-11	3.168E-11	4.047E-11	2.870E-11	1.750E-11	1.220E-11	9.193E-12	7.159E-12	5.723E-12	4.674E-12
NNE	2.175E-10	1.000E-10	6.065E-11	3.193E-11	2.045E-11	1.475E-11	1.146E-11	9.780E-12	8.213E-12	8.668E-12	7.393E-12
NE	2.600E-10	1.193E-10	7.167E-11	3.706E-11	2.353E-11	1.672E-11	1.279E-11	1.024E-11	8.629E-12	7.311E-12	6.637E-12
ENE	1.796E-10	8.362E-11	5.082E-11	2.672E-11	1.715E-11	1.235E-11	9.565E-12	7.756E-12	6.536E-12	5.603E-12	4.987E-12
E	1.466E-10	6.865E-11	4.195E-11	2.226E-11	1.428E-11	1.045E-11	8.117E-12	6.557E-12	5.463E-12	4.634E-12	4.008E-12
ESE	1.486E-10	6.960E-11	4.259E-11	2.268E-11	1.461E-11	1.079E-11	8.478E-12	7.001E-12	5.945E-12	5.134E-12	4.500E-12
SE	1.293E-10	6.064E-11	3.715E-11	1.981E-11	1.277E-11	9.415E-12	7.310E-12	5.972E-12	5.055E-12	4.351E-12	3.823E-12
SSE	1.265E-10	5.898E-11	3.645E-11	1.906E-11	1.267E-11	1.530E-11	1.482E-11	1.163E-11	9.017E-12	6.784E-12	5.275E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Reactor Bldg/Fuel Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.350E-09	1.419E-09	4.380E-10	2.121E-10	1.252E-10	4.992E-11	1.515E-11	7.259E-12	7.218E-12	6.046E-12
SSW	4.379E-09	1.208E-09	3.833E-10	1.878E-10	1.113E-10	4.449E-11	1.351E-11	6.086E-12	4.470E-12	4.346E-12
SW	6.472E-09	1.795E-09	5.618E-10	2.723E-10	1.607E-10	6.403E-11	1.917E-11	8.397E-12	5.964E-12	4.904E-12
WSW	7.053E-09	1.824E-09	5.486E-10	2.621E-10	1.548E-10	6.188E-11	2.034E-11	1.149E-11	6.977E-12	4.392E-12
W	8.344E-09	2.085E-09	6.081E-10	2.863E-10	1.671E-10	6.774E-11	2.769E-11	1.355E-11	7.425E-12	4.607E-12
WNW	9.300E-09	2.312E-09	6.698E-10	3.163E-10	1.851E-10	7.911E-11	3.486E-11	1.641E-11	8.924E-12	5.530E-12
NW	8.880E-09	2.184E-09	6.264E-10	2.957E-10	1.733E-10	7.084E-11	3.234E-11	1.632E-11	8.554E-12	5.300E-12
NNW	7.066E-09	1.652E-09	4.718E-10	2.242E-10	1.329E-10	5.614E-11	2.957E-11	1.474E-11	7.800E-12	4.843E-12
N	6.749E-09	1.647E-09	4.810E-10	2.297E-10	1.353E-10	5.504E-11	3.329E-11	1.837E-11	9.276E-12	5.760E-12
NNE	1.401E-08	3.379E-09	9.844E-10	4.665E-10	2.732E-10	1.086E-10	3.321E-11	1.495E-11	9.662E-12	8.061E-12

NE	1.415E-08	3.753E-09	1.152E-09	5.545E-10	3.262E-10	1.294E-10	3.874E-11	1.696E-11	1.035E-11	7.452E-12
ENE	8.927E-09	2.425E-09	7.691E-10	3.782E-10	2.247E-10	9.036E-11	2.782E-11	1.251E-11	7.808E-12	5.651E-12
E	7.637E-09	2.019E-09	6.284E-10	3.082E-10	1.833E-10	7.411E-11	2.309E-11	1.054E-11	6.586E-12	4.648E-12
ESE	8.150E-09	2.102E-09	6.420E-10	3.129E-10	1.857E-10	7.515E-11	2.352E-11	1.088E-11	7.021E-12	5.140E-12
SE	6.940E-09	1.800E-09	5.550E-10	2.717E-10	1.616E-10	6.545E-11	2.053E-11	9.466E-12	6.005E-12	4.364E-12
SSE	6.644E-09	1.752E-09	5.454E-10	2.668E-10	1.583E-10	6.397E-11	2.008E-11	1.440E-11	1.155E-11	6.887E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

0Fermi COL A (using distances from RW Vent Stack)

0Reactor Bldg/Fuel Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+							
+							
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Site Boundary	S	.74	2.9E-07	2.9E-07	2.7E-07	5.8E-09
	Site Boundary	SSW	.76	2.2E-07	2.2E-07	2.1E-07	4.7E-09
	Site Boundary	SW	.93	2.3E-07	2.3E-07	2.2E-07	4.6E-09
	Site Boundary	WSW	.71	3.2E-07	3.2E-07	2.9E-07	8.2E-09
	Site Boundary	W	.57	4.8E-07	4.8E-07	4.4E-07	1.3E-08
	Site Boundary	WNW	.54	5.5E-07	5.5E-07	5.1E-07	1.5E-08
	Site Boundary	NW	.53	5.5E-07	5.5E-07	5.1E-07	1.5E-08
	Site Boundary	NNW	.53	5.1E-07	5.1E-07	4.8E-07	1.2E-08
	Site Boundary	N	.61	4.7E-07	4.7E-07	4.3E-07	9.5E-09
	Site Boundary	NNE	.88	5.6E-07	5.6E-07	5.2E-07	1.0E-08
	Site Boundary	NE	1.22	3.0E-07	3.0E-07	2.8E-07	5.3E-09
	Site Boundary	SSE	.74	2.8E-07	2.8E-07	2.6E-07	7.2E-09
	Residence	SSE	.96	1.9E-07	1.9E-07	1.8E-07	4.3E-09
	Residence	SSW	.93	1.6E-07	1.6E-07	1.5E-07	3.0E-09
	Residence	SW	1.03	2.0E-07	2.0E-07	1.9E-07	3.7E-09
	Residence	WSW	1.04	1.8E-07	1.8E-07	1.7E-07	3.7E-09
	Residence	W	.96	2.3E-07	2.3E-07	2.1E-07	5.1E-09
	Residence	NW	.64	4.2E-07	4.2E-07	3.9E-07	1.2E-08
	Residence	NW	1.02	2.0E-07	2.0E-07	1.9E-07	4.8E-09
	Residence	NNW	1.15	1.5E-07	1.5E-07	1.4E-07	2.7E-09
	Residence	NNE	1.25	3.1E-07	3.1E-07	2.8E-07	4.5E-09
	Residence	NNE	1.18	3.4E-07	3.4E-07	3.1E-07	5.2E-09
	Residence	NE	1.30	2.8E-07	2.7E-07	2.6E-07	4.6E-09
	Garden	S	1.32	1.2E-07	1.2E-07	1.1E-07	1.7E-09
	Garden	WSW	2.05	6.1E-08	6.0E-08	5.6E-08	8.1E-10
	Garden	W	1.49	1.1E-07	1.1E-07	1.0E-07	1.9E-09
	Garden	NW	.64	4.1E-07	4.1E-07	3.9E-07	1.2E-08
	Garden	NNW	1.02	1.8E-07	1.8E-07	1.7E-07	3.6E-09
	Garden	NNW	1.41	1.1E-07	1.1E-07	1.0E-07	1.7E-09

Garden	N	2.26	7.2E-08	7.1E-08	6.6E-08	5.8E-10
Garden	NNE	2.09	1.4E-07	1.4E-07	1.3E-07	1.4E-09
Garden	NE	2.18	1.3E-07	1.3E-07	1.2E-07	1.5E-09
Sheep	NNW	4.41	2.0E-08	2.0E-08	1.8E-08	1.4E-10
Sheep	NNE	4.42	4.9E-08	4.8E-08	4.4E-08	2.8E-10
Goat	WNW	2.27	6.3E-08	6.3E-08	5.8E-08	8.0E-10
Goat	NNW	3.04	3.4E-08	3.4E-08	3.2E-08	3.0E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.550	LESS THAN	2.348
MIXED	BETWEEN	1.550 AND 7.751	BETWEEN	2.348 AND 11.739
GROUND LEVEL	ABOVE	7.751	ABOVE	11.739

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Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.573E-06	5.571E-07	3.247E-07	1.841E-07	9.270E-08	5.992E-08	4.328E-08	3.333E-08	2.679E-08	2.220E-08	1.884E-08
SSW	1.104E-06	4.051E-07	2.451E-07	1.456E-07	7.866E-08	5.255E-08	3.847E-08	2.975E-08	2.390E-08	1.976E-08	1.670E-08
SW	1.318E-06	4.872E-07	2.977E-07	1.813E-07	9.805E-08	6.392E-08	4.564E-08	3.455E-08	2.726E-08	2.220E-08	1.853E-08
WSW	1.323E-06	4.817E-07	2.832E-07	1.662E-07	8.516E-08	5.372E-08	3.757E-08	2.805E-08	2.193E-08	1.773E-08	1.488E-08
W	1.817E-06	6.197E-07	3.540E-07	2.008E-07	9.768E-08	6.007E-08	4.147E-08	3.074E-08	2.394E-08	1.932E-08	1.602E-08
WNW	2.105E-06	6.935E-07	3.838E-07	2.173E-07	1.078E-07	6.733E-08	4.700E-08	3.514E-08	2.754E-08	2.235E-08	1.863E-08
NW	2.048E-06	6.823E-07	3.660E-07	2.013E-07	9.813E-08	6.110E-08	4.269E-08	3.199E-08	2.515E-08	2.048E-08	1.719E-08
NNW	2.002E-06	6.562E-07	3.513E-07	1.905E-07	9.135E-08	5.698E-08	4.013E-08	3.036E-08	2.409E-08	1.978E-08	1.683E-08
N	2.181E-06	7.420E-07	4.171E-07	2.323E-07	1.151E-07	7.346E-08	5.261E-08	4.028E-08	3.224E-08	2.664E-08	2.267E-08
NNE	4.422E-06	1.508E-06	8.504E-07	4.635E-07	2.193E-07	1.357E-07	9.519E-08	7.183E-08	5.804E-08	4.850E-08	4.096E-08
NE	3.110E-06	1.134E-06	6.726E-07	3.879E-07	2.001E-07	1.299E-07	9.351E-08	7.161E-08	5.720E-08	4.714E-08	3.978E-08
ENE	2.042E-06	7.337E-07	4.306E-07	2.553E-07	1.436E-07	9.960E-08	7.510E-08	5.947E-08	4.872E-08	4.094E-08	3.510E-08
E	1.442E-06	5.426E-07	3.192E-07	1.880E-07	1.052E-07	7.297E-08	5.525E-08	4.397E-08	3.620E-08	3.057E-08	2.633E-08
ESE	1.870E-06	6.580E-07	3.707E-07	2.113E-07	1.132E-07	7.711E-08	5.792E-08	4.597E-08	3.785E-08	3.200E-08	2.762E-08
SE	1.564E-06	5.521E-07	3.121E-07	1.797E-07	9.864E-08	6.803E-08	5.134E-08	4.077E-08	3.352E-08	2.827E-08	2.432E-08
SSE	1.629E-06	5.764E-07	3.336E-07	1.928E-07	1.024E-07	6.829E-08	5.016E-08	3.900E-08	3.153E-08	2.623E-08	2.232E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.629E-08	9.906E-09	7.108E-09	4.640E-09	3.432E-09	2.722E-09	2.257E-09	1.931E-09	1.689E-09	1.503E-09	1.353E-09
SSW	1.438E-08	8.497E-09	5.942E-09	3.718E-09	2.657E-09	2.045E-09	1.651E-09	1.379E-09	1.181E-09	1.031E-09	9.131E-10
SW	1.578E-08	8.905E-09	6.043E-09	3.631E-09	2.521E-09	1.897E-09	1.504E-09	1.236E-09	1.043E-09	8.979E-10	7.857E-10
WSW	1.275E-08	7.155E-09	4.855E-09	2.930E-09	2.045E-09	1.546E-09	1.230E-09	1.013E-09	8.561E-10	7.374E-10	6.445E-10
W	1.359E-08	7.876E-09	5.494E-09	3.468E-09	2.497E-09	1.916E-09	1.518E-09	1.236E-09	1.034E-09	8.845E-10	7.692E-10
WNW	1.586E-08	9.499E-09	6.827E-09	4.563E-09	3.426E-09	2.668E-09	2.110E-09	1.725E-09	1.450E-09	1.244E-09	1.086E-09
NW	1.475E-08	8.826E-09	6.345E-09	4.247E-09	3.235E-09	2.617E-09	2.175E-09	1.827E-09	1.548E-09	1.334E-09	1.167E-09

NNW	1.462E-08	9.238E-09	6.909E-09	4.854E-09	3.763E-09	3.016E-09	2.434E-09	2.000E-09	1.685E-09	1.450E-09	1.268E-09
N	1.968E-08	1.239E-08	9.153E-09	6.258E-09	4.770E-09	3.832E-09	3.156E-09	2.628E-09	2.212E-09	1.898E-09	1.655E-09
NNE	3.531E-08	2.063E-08	1.444E-08	9.098E-09	6.541E-09	5.057E-09	4.096E-09	3.428E-09	2.938E-09	2.565E-09	2.272E-09
NE	3.424E-08	2.018E-08	1.416E-08	8.933E-09	6.428E-09	4.974E-09	4.034E-09	3.381E-09	2.904E-09	2.540E-09	2.255E-09
ENE	3.061E-08	1.888E-08	1.360E-08	8.877E-09	6.532E-09	5.146E-09	4.238E-09	3.601E-09	3.131E-09	2.771E-09	2.488E-09
E	2.306E-08	1.429E-08	1.031E-08	6.730E-09	4.938E-09	3.869E-09	3.164E-09	2.667E-09	2.298E-09	2.015E-09	1.791E-09
ESE	2.425E-08	1.530E-08	1.123E-08	7.539E-09	5.662E-09	4.529E-09	3.772E-09	3.234E-09	2.831E-09	2.519E-09	2.270E-09
SE	2.128E-08	1.325E-08	9.606E-09	6.321E-09	4.678E-09	3.700E-09	3.056E-09	2.603E-09	2.267E-09	2.010E-09	1.806E-09
SSE	1.934E-08	1.201E-08	8.768E-09	5.931E-09	4.552E-09	3.746E-09	3.216E-09	2.836E-09	2.542E-09	2.300E-09	2.092E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

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Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.139E-07	9.845E-08	4.374E-08	2.691E-08	1.889E-08	1.008E-08	4.652E-09	2.725E-09	1.932E-09	1.503E-09
SSW	2.364E-07	8.194E-08	3.873E-08	2.399E-08	1.675E-08	8.669E-09	3.740E-09	2.051E-09	1.382E-09	1.032E-09
SW	2.881E-07	1.014E-07	4.608E-08	2.742E-08	1.860E-08	9.159E-09	3.674E-09	1.906E-09	1.239E-09	8.993E-10
WSW	2.753E-07	8.920E-08	3.807E-08	2.208E-08	1.494E-08	7.376E-09	2.965E-09	1.553E-09	1.015E-09	7.382E-10
W	3.450E-07	1.039E-07	4.214E-08	2.412E-08	1.610E-08	8.087E-09	3.487E-09	1.912E-09	1.240E-09	8.862E-10
WNW	3.787E-07	1.141E-07	4.768E-08	2.774E-08	1.871E-08	9.725E-09	4.561E-09	2.647E-09	1.730E-09	1.247E-09
NW	3.631E-07	1.046E-07	4.332E-08	2.533E-08	1.726E-08	9.039E-09	4.264E-09	2.605E-09	1.820E-09	1.335E-09
NNW	3.476E-07	9.810E-08	4.071E-08	2.424E-08	1.689E-08	9.400E-09	4.826E-09	2.982E-09	2.004E-09	1.452E-09
N	4.072E-07	1.226E-07	5.324E-08	3.240E-08	2.274E-08	1.257E-08	6.240E-09	3.812E-09	2.620E-09	1.901E-09
NNE	8.247E-07	2.364E-07	9.665E-08	5.835E-08	4.110E-08	2.114E-08	9.148E-09	5.069E-09	3.432E-09	2.567E-09
NE	6.486E-07	2.106E-07	9.445E-08	5.748E-08	3.991E-08	2.063E-08	8.981E-09	4.986E-09	3.386E-09	2.542E-09
ENE	4.200E-07	1.488E-07	7.538E-08	4.883E-08	3.517E-08	1.914E-08	8.885E-09	5.153E-09	3.604E-09	2.773E-09
E	3.105E-07	1.093E-07	5.547E-08	3.628E-08	2.637E-08	1.447E-08	6.730E-09	3.872E-09	2.668E-09	2.016E-09
ESE	3.637E-07	1.190E-07	5.826E-08	3.794E-08	2.767E-08	1.548E-08	7.525E-09	4.528E-09	3.234E-09	2.519E-09
SE	3.066E-07	1.030E-07	5.156E-08	3.359E-08	2.436E-08	1.341E-08	6.320E-09	3.703E-09	2.605E-09	2.011E-09
SSE	3.250E-07	1.073E-07	5.053E-08	3.164E-08	2.238E-08	1.220E-08	5.948E-09	3.749E-09	2.833E-09	2.295E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.237E+01	9.237E+01	9.237E+01	9.237E+01	9.237E+01	8.933E+01	8.130E+01	7.178E+01	6.200E+01	5.214E+01
SSW	9.181E+01	9.142E+01	9.142E+01	9.142E+01	9.142E+01	8.905E+01	8.279E+01	7.536E+01	6.774E+01	6.006E+01
SW	8.991E+01	8.915E+01	8.915E+01	8.915E+01	8.915E+01	8.691E+01	8.101E+01	7.400E+01	6.680E+01	5.955E+01
WSW	8.694E+01	8.600E+01	8.600E+01	8.600E+01	8.439E+01	7.894E+01	6.823E+01	5.553E+01	4.249E+01	2.933E+01
W	8.153E+01	8.022E+01	8.022E+01	8.022E+01	8.022E+01	7.063E+01	4.534E+01	1.631E+01	2.086E+00	9.013E-01
WNW	8.411E+01	8.258E+01	8.258E+01	8.258E+01	8.258E+01	7.137E+01	4.181E+01	1.113E+01	1.006E+00	5.691E-01
NW	8.818E+01	8.688E+01	8.688E+01	8.688E+01	8.634E+01	7.821E+01	5.801E+01	3.404E+01	1.178E+01	2.957E+00
NNW	8.811E+01	8.717E+01	8.717E+01	8.717E+01	8.610E+01	7.488E+01	4.772E+01	1.685E+01	2.338E+00	1.160E+00

N	8.907E+01	8.833E+01	8.833E+01	8.833E+01	8.780E+01	7.895E+01	5.683E+01	3.059E+01	8.600E+00	2.056E+00
NNE	8.938E+01	8.941E+01	8.941E+01	8.723E+01	8.490E+01	8.329E+01	8.026E+01	7.667E+01	7.299E+01	6.927E+01
NE	9.110E+01	9.112E+01	9.112E+01	9.112E+01	9.112E+01	8.963E+01	8.570E+01	8.104E+01	7.626E+01	7.143E+01
ENE	9.526E+01	9.527E+01	9.527E+01	9.527E+01	9.527E+01	9.378E+01	8.985E+01	8.518E+01	8.039E+01	7.556E+01
E	9.725E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01
ESE	9.564E+01	9.565E+01	9.565E+01	9.565E+01	9.565E+01	9.517E+01	9.392E+01	9.244E+01	9.091E+01	8.937E+01
SE	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.475E+01	9.224E+01	8.927E+01	8.622E+01	8.314E+01
SSE	9.413E+01	9.413E+01	9.413E+01	9.413E+01	9.413E+01	8.952E+01	7.736E+01	6.293E+01	4.812E+01	3.319E+01

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Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.572E-06	5.565E-07	3.242E-07	1.838E-07	9.244E-08	5.970E-08	4.307E-08	3.314E-08	2.661E-08	2.203E-08	1.867E-08
SSW	1.104E-06	4.047E-07	2.447E-07	1.454E-07	7.844E-08	5.236E-08	3.829E-08	2.958E-08	2.375E-08	1.961E-08	1.656E-08
SW	1.317E-06	4.867E-07	2.973E-07	1.810E-07	9.780E-08	6.371E-08	4.545E-08	3.437E-08	2.710E-08	2.204E-08	1.838E-08
WSW	1.323E-06	4.813E-07	2.828E-07	1.659E-07	8.496E-08	5.355E-08	3.742E-08	2.792E-08	2.180E-08	1.761E-08	1.477E-08
W	1.817E-06	6.192E-07	3.536E-07	2.005E-07	9.746E-08	5.989E-08	4.131E-08	3.060E-08	2.380E-08	1.919E-08	1.590E-08
WNW	2.104E-06	6.929E-07	3.834E-07	2.170E-07	1.075E-07	6.711E-08	4.681E-08	3.497E-08	2.739E-08	2.221E-08	1.849E-08
NW	2.047E-06	6.816E-07	3.654E-07	2.009E-07	9.785E-08	6.087E-08	4.249E-08	3.181E-08	2.498E-08	2.032E-08	1.704E-08
NNW	2.001E-06	6.555E-07	3.508E-07	1.901E-07	9.109E-08	5.677E-08	3.994E-08	3.019E-08	2.393E-08	1.964E-08	1.669E-08
N	2.180E-06	7.412E-07	4.165E-07	2.319E-07	1.147E-07	7.318E-08	5.235E-08	4.003E-08	3.201E-08	2.642E-08	2.246E-08
NNE	4.420E-06	1.507E-06	8.493E-07	4.627E-07	2.187E-07	1.352E-07	9.477E-08	7.145E-08	5.768E-08	4.816E-08	4.062E-08
NE	3.108E-06	1.133E-06	6.716E-07	3.872E-07	1.996E-07	1.295E-07	9.311E-08	7.124E-08	5.685E-08	4.680E-08	3.946E-08
ENE	2.041E-06	7.328E-07	4.299E-07	2.547E-07	1.431E-07	9.919E-08	7.472E-08	5.910E-08	4.836E-08	4.059E-08	3.477E-08
E	1.442E-06	5.419E-07	3.186E-07	1.876E-07	1.048E-07	7.266E-08	5.495E-08	4.368E-08	3.592E-08	3.029E-08	2.605E-08
ESE	1.869E-06	6.572E-07	3.701E-07	2.109E-07	1.129E-07	7.678E-08	5.761E-08	4.567E-08	3.756E-08	3.172E-08	2.734E-08
SE	1.563E-06	5.514E-07	3.116E-07	1.793E-07	9.833E-08	6.774E-08	5.107E-08	4.051E-08	3.327E-08	2.802E-08	2.408E-08
SSE	1.628E-06	5.758E-07	3.331E-07	1.924E-07	1.021E-07	6.803E-08	4.991E-08	3.877E-08	3.131E-08	2.602E-08	2.211E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.613E-08	9.755E-09	6.962E-09	4.496E-09	3.289E-09	2.580E-09	2.117E-09	1.792E-09	1.551E-09	1.365E-09	1.217E-09
SSW	1.425E-08	8.379E-09	5.831E-09	3.613E-09	2.556E-09	1.948E-09	1.558E-09	1.288E-09	1.092E-09	9.437E-10	8.275E-10
SW	1.563E-08	8.780E-09	5.927E-09	3.523E-09	2.420E-09	1.801E-09	1.412E-09	1.147E-09	9.574E-10	8.155E-10	7.060E-10
WSW	1.264E-08	7.058E-09	4.765E-09	2.845E-09	1.964E-09	1.468E-09	1.155E-09	9.411E-10	7.866E-10	6.702E-10	5.797E-10
W	1.347E-08	7.774E-09	5.396E-09	3.372E-09	2.405E-09	1.827E-09	1.434E-09	1.156E-09	9.589E-10	8.125E-10	7.003E-10
WNW	1.573E-08	9.382E-09	6.713E-09	4.444E-09	3.305E-09	2.548E-09	1.996E-09	1.617E-09	1.346E-09	1.145E-09	9.903E-10
NW	1.460E-08	8.693E-09	6.214E-09	4.111E-09	3.095E-09	2.475E-09	2.033E-09	1.689E-09	1.414E-09	1.205E-09	1.044E-09
NNW	1.449E-08	9.105E-09	6.773E-09	4.705E-09	3.604E-09	2.852E-09	2.272E-09	1.845E-09	1.538E-09	1.308E-09	1.132E-09
N	1.947E-08	1.218E-08	8.947E-09	6.039E-09	4.544E-09	3.603E-09	2.930E-09	2.409E-09	2.003E-09	1.698E-09	1.463E-09
NNE	3.498E-08	2.034E-08	1.416E-08	8.828E-09	6.279E-09	4.802E-09	3.848E-09	3.186E-09	2.703E-09	2.335E-09	2.048E-09
NE	3.393E-08	1.990E-08	1.389E-08	8.667E-09	6.167E-09	4.718E-09	3.784E-09	3.135E-09	2.662E-09	2.303E-09	2.022E-09
ENE	3.028E-08	1.857E-08	1.330E-08	8.566E-09	6.224E-09	4.840E-09	3.935E-09	3.300E-09	2.833E-09	2.475E-09	2.193E-09
E	2.279E-08	1.403E-08	1.006E-08	6.474E-09	4.684E-09	3.619E-09	2.919E-09	2.427E-09	2.063E-09	1.784E-09	1.564E-09
ESE	2.397E-08	1.503E-08	1.096E-08	7.267E-09	5.388E-09	4.254E-09	3.498E-09	2.961E-09	2.559E-09	2.248E-09	2.001E-09
SE	2.104E-08	1.302E-08	9.385E-09	6.100E-09	4.458E-09	3.483E-09	2.841E-09	2.390E-09	2.056E-09	1.800E-09	1.597E-09
SSE	1.915E-08	1.182E-08	8.580E-09	5.734E-09	4.348E-09	3.534E-09	2.997E-09	2.611E-09	2.312E-09	2.067E-09	1.857E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 71.30 REP. WIND HEIGHT (METERS) 71.3

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     DIAMETER        (METERS)    1.95                    BUILDING HEIGHT        (METERS)       52.0
     EXIT VELOCITY   (METERS)   17.78                    BLDG.MIN.CRS.SEC.AREA  (SQ.METERS)      .0
                                                          HEAT EMISSION RATE     (CAL/SEC)        .0

AT THE RELEASE HEIGHT:                                 /  AT THE MEASURED WIND HEIGHT ( 10.0 METERS):
 VENT RELEASE MODE   WIND SPEED (METERS/SEC)           /  VENT RELEASE MODE   WIND SPEED (METERS/SEC)       WIND SPEED (METERS/SEC)
                                                       /                      STABLE CONDITIONS             UNSTABLE/NEUTRAL CONDITIONS
     ELEVATED        LESS THAN  3.556                  /      ELEVATED        LESS THAN  1.332             LESS THAN  2.176
     MIXED           BETWEEN    3.556 AND 17.780       /      MIXED           BETWEEN    1.332 AND  6.659  BETWEEN    2.176 AND 10.881
     GROUND LEVEL    ABOVE     17.780                  /      GROUND LEVEL    ABOVE      6.659             ABOVE     10.881
USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0             RUN DATE: 11-23-2009    16:27

Fermi COL A (using distances from RW Vent Stack)

 Turbine Bldg Stack
  2.260 DAY DECAY,  UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
                                                SEGMENT BOUNDARIES IN MILES FROM THE SITE
DIRECTION .5-1     1-2       2-3       3-4       4-5       5-10      10-20     20-30     30-40     40-50
 FROM SITE
    S 3.134E-07 9.818E-08 4.353E-08 2.673E-08 1.872E-08 9.930E-09 4.507E-09 2.584E-09 1.793E-09 1.366E-09
  SSW 2.361E-07 8.172E-08 3.856E-08 2.384E-08 1.661E-08 8.551E-09 3.636E-09 1.954E-09 1.291E-09 9.447E-10
   SW 2.877E-07 1.011E-07 4.589E-08 2.725E-08 1.845E-08 9.035E-09 3.567E-09 1.810E-09 1.150E-09 8.170E-10
  WSW 2.750E-07 8.900E-08 3.792E-08 2.195E-08 1.482E-08 7.280E-09 2.880E-09 1.475E-09 9.434E-10 6.712E-10
    W 3.446E-07 1.037E-07 4.198E-08 2.399E-08 1.598E-08 7.984E-09 3.392E-09 1.824E-09 1.160E-09 8.143E-10
  WNW 3.782E-07 1.139E-07 4.749E-08 2.758E-08 1.857E-08 9.607E-09 4.442E-09 2.529E-09 1.622E-09 1.147E-09
   NW 3.626E-07 1.043E-07 4.312E-08 2.516E-08 1.711E-08 8.905E-09 4.127E-09 2.464E-09 1.683E-09 1.207E-09
  NNW 3.471E-07 9.783E-08 4.053E-08 2.408E-08 1.675E-08 9.265E-09 4.675E-09 2.820E-09 1.850E-09 1.311E-09
    N 4.066E-07 1.223E-07 5.298E-08 3.217E-08 2.253E-08 1.236E-08 6.021E-09 3.585E-09 2.403E-09 1.701E-09
  NNE 8.236E-07 2.358E-07 9.623E-08 5.799E-08 4.077E-08 2.085E-08 8.879E-09 4.814E-09 3.191E-09 2.338E-09
   NE 6.477E-07 2.101E-07 9.405E-08 5.713E-08 3.959E-08 2.035E-08 8.716E-09 4.731E-09 3.140E-09 2.305E-09
  ENE 4.193E-07 1.484E-07 7.500E-08 4.847E-08 3.483E-08 1.883E-08 8.576E-09 4.847E-09 3.303E-09 2.477E-09
    E 3.100E-07 1.089E-07 5.517E-08 3.599E-08 2.610E-08 1.421E-08 6.475E-09 3.623E-09 2.429E-09 1.785E-09
  ESE 3.631E-07 1.186E-07 5.795E-08 3.765E-08 2.739E-08 1.521E-08 7.254E-09 4.254E-09 2.961E-09 2.249E-09
   SE 3.061E-07 1.027E-07 5.129E-08 3.334E-08 2.412E-08 1.319E-08 6.100E-09 3.486E-09 2.391E-09 1.800E-09
  SSE 3.245E-07 1.070E-07 5.028E-08 3.142E-08 2.217E-08 1.201E-08 5.750E-09 3.536E-09 2.607E-09 2.062E-09

USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:27

Fermi COL A (using distances from RW Vent Stack)


Turbine Bldg Stack

  8.000 DAY DECAY,    DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)                DISTANCE IN  MILES FROM THE SITE
   SECTOR          .250      .500      .750     1.000     1.500     2.000     2.500     3.000     3.500     4.000     4.500

       S        1.495E-06 5.155E-07 2.958E-07 1.670E-07 8.398E-08 5.425E-08 3.911E-08 3.004E-08 2.407E-08 1.989E-08 1.682E-08
     SSW        1.052E-06 3.756E-07 2.242E-07 1.332E-07 7.228E-08 4.835E-08 3.534E-08 2.725E-08 2.182E-08 1.797E-08 1.514E-08
      SW        1.258E-06 4.527E-07 2.733E-07 1.670E-07 9.064E-08 5.901E-08 4.196E-08 3.160E-08 2.480E-08 2.009E-08 1.667E-08
     WSW        1.266E-06 4.487E-07 2.600E-07 1.526E-07 7.816E-08 4.913E-08 3.419E-08 2.538E-08 1.972E-08 1.586E-08 1.325E-08
       W        1.735E-06 5.743E-07 3.226E-07 1.822E-07 8.814E-08 5.389E-08 3.696E-08 2.723E-08 2.107E-08 1.690E-08 1.394E-08
     WNW        2.017E-06 6.464E-07 3.512E-07 1.980E-07 9.781E-08 6.083E-08 4.223E-08 3.139E-08 2.447E-08 1.975E-08 1.637E-08
      NW        1.966E-06 6.393E-07 3.364E-07 1.837E-07 8.905E-08 5.515E-08 3.831E-08 2.855E-08 2.232E-08 1.808E-08 1.510E-08
     NNW        1.916E-06 6.115E-07 3.206E-07 1.723E-07 8.208E-08 5.098E-08 3.576E-08 2.695E-08 2.131E-08 1.743E-08 1.480E-08
       N        2.081E-06 6.882E-07 3.794E-07 2.099E-07 1.037E-07 6.613E-08 4.729E-08 3.614E-08 2.886E-08 2.379E-08 2.021E-08
     NNE        4.208E-06 1.393E-06 7.701E-07 4.161E-07 1.955E-07 1.206E-07 8.430E-08 6.342E-08 5.120E-08 4.275E-08 3.601E-08
      NE        2.961E-06 1.050E-06 6.141E-07 3.535E-07 1.828E-07 1.186E-07 8.521E-08 6.506E-08 5.180E-08 4.254E-08 3.578E-08
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ENE	1.952E-06	6.836E-07	3.953E-07	2.343E-07	1.327E-07	9.230E-08	6.959E-08	5.501E-08	4.497E-08	3.770E-08	3.224E-08
E	1.383E-06	5.096E-07	2.955E-07	1.738E-07	9.762E-08	6.789E-08	5.138E-08	4.083E-08	3.354E-08	2.825E-08	2.427E-08
ESE	1.792E-06	6.158E-07	3.413E-07	1.938E-07	1.041E-07	7.101E-08	5.334E-08	4.230E-08	3.477E-08	2.934E-08	2.528E-08
SE	1.499E-06	5.170E-07	2.874E-07	1.649E-07	9.094E-08	6.288E-08	4.747E-08	3.765E-08	3.090E-08	2.600E-08	2.232E-08
SSE	1.555E-06	5.367E-07	3.059E-07	1.763E-07	9.388E-08	6.263E-08	4.593E-08	3.561E-08	2.870E-08	2.380E-08	2.018E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.450E-08	8.725E-09	6.203E-09	3.995E-09	2.925E-09	2.302E-09	1.898E-09	1.615E-09	1.401E-09	1.236E-09	1.100E-09
SSW	1.299E-08	7.566E-09	5.227E-09	3.209E-09	2.259E-09	1.718E-09	1.373E-09	1.136E-09	9.613E-10	8.305E-10	7.271E-10
SW	1.412E-08	7.805E-09	5.201E-09	3.034E-09	2.056E-09	1.516E-09	1.181E-09	9.538E-10	7.905E-10	6.696E-10	5.761E-10
WSW	1.130E-08	6.202E-09	4.130E-09	2.418E-09	1.648E-09	1.220E-09	9.501E-10	7.608E-10	6.228E-10	5.200E-10	4.410E-10
W	1.175E-08	6.700E-09	4.608E-09	2.844E-09	1.966E-09	1.439E-09	1.097E-09	8.621E-10	6.987E-10	5.798E-10	4.903E-10
WNW	1.387E-08	8.200E-09	5.833E-09	3.826E-09	2.731E-09	2.032E-09	1.549E-09	1.224E-09	9.966E-10	8.307E-10	7.053E-10
NW	1.290E-08	7.611E-09	5.406E-09	3.563E-09	2.660E-09	2.064E-09	1.644E-09	1.334E-09	1.094E-09	9.154E-10	7.793E-10
NNW	1.283E-08	8.071E-09	6.013E-09	4.195E-09	3.115E-09	2.373E-09	1.844E-09	1.465E-09	1.196E-09	9.996E-10	8.503E-10
N	1.751E-08	1.098E-08	8.087E-09	5.494E-09	4.127E-09	3.175E-09	2.501E-09	2.012E-09	1.643E-09	1.371E-09	1.164E-09
NNE	3.096E-08	1.788E-08	1.238E-08	7.661E-09	5.426E-09	4.141E-09	3.316E-09	2.745E-09	2.320E-09	2.001E-09	1.749E-09
NE	3.069E-08	1.787E-08	1.240E-08	7.686E-09	5.453E-09	4.170E-09	3.348E-09	2.780E-09	2.359E-09	2.041E-09	1.791E-09
ENE	2.804E-08	1.712E-08	1.223E-08	7.874E-09	5.732E-09	4.475E-09	3.657E-09	3.085E-09	2.656E-09	2.330E-09	2.070E-09
E	2.120E-08	1.300E-08	9.298E-09	5.974E-09	4.327E-09	3.352E-09	2.714E-09	2.266E-09	1.935E-09	1.683E-09	1.483E-09
ESE	2.214E-08	1.386E-08	1.011E-08	6.709E-09	4.993E-09	3.962E-09	3.277E-09	2.791E-09	2.429E-09	2.150E-09	1.926E-09
SE	1.948E-08	1.202E-08	8.643E-09	5.612E-09	4.109E-09	3.221E-09	2.640E-09	2.232E-09	1.930E-09	1.699E-09	1.513E-09
SSE	1.744E-08	1.072E-08	7.765E-09	5.200E-09	3.969E-09	3.257E-09	2.792E-09	2.448E-09	2.147E-09	1.892E-09	1.675E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.874E-07	8.922E-08	3.952E-08	2.418E-08	1.687E-08	8.888E-09	4.010E-09	2.307E-09	1.614E-09	1.234E-09
SSW	2.174E-07	7.519E-08	3.557E-08	2.190E-08	1.518E-08	7.731E-09	3.235E-09	1.724E-09	1.137E-09	8.310E-10
SW	2.659E-07	9.354E-08	4.236E-08	2.495E-08	1.674E-08	8.051E-09	3.081E-09	1.526E-09	9.565E-10	6.708E-10
WSW	2.542E-07	8.179E-08	3.465E-08	1.987E-08	1.330E-08	6.413E-09	2.456E-09	1.226E-09	7.623E-10	5.212E-10
W	3.161E-07	9.381E-08	3.758E-08	2.124E-08	1.401E-08	6.893E-09	2.846E-09	1.443E-09	8.668E-10	5.819E-10
WNW	3.487E-07	1.036E-07	4.286E-08	2.465E-08	1.645E-08	8.408E-09	3.785E-09	2.025E-09	1.230E-09	8.334E-10
NW	3.359E-07	9.502E-08	3.890E-08	2.248E-08	1.517E-08	7.806E-09	3.571E-09	2.055E-09	1.331E-09	9.180E-10
NNW	3.193E-07	8.831E-08	3.630E-08	2.144E-08	1.485E-08	8.213E-09	4.119E-09	2.359E-09	1.471E-09	1.003E-09
N	3.727E-07	1.106E-07	4.785E-08	2.901E-08	2.027E-08	1.115E-08	5.463E-09	3.159E-09	2.011E-09	1.375E-09
NNE	7.513E-07	2.112E-07	8.562E-08	5.147E-08	3.614E-08	1.834E-08	7.716E-09	4.154E-09	2.746E-09	2.002E-09
NE	5.953E-07	1.922E-07	8.606E-08	5.206E-08	3.590E-08	1.828E-08	7.740E-09	4.183E-09	2.782E-09	2.043E-09
ENE	3.878E-07	1.373E-07	6.981E-08	4.507E-08	3.230E-08	1.738E-08	7.891E-09	4.483E-09	3.085E-09	2.330E-09
E	2.890E-07	1.013E-07	5.156E-08	3.361E-08	2.431E-08	1.318E-08	5.981E-09	3.357E-09	2.268E-09	1.684E-09

ESE	3.367E-07	1.093E-07	5.364E-08	3.485E-08	2.532E-08	1.403E-08	6.702E-09	3.963E-09	2.792E-09	2.149E-09
SE	2.840E-07	9.491E-08	4.765E-08	3.096E-08	2.236E-08	1.218E-08	5.617E-09	3.225E-09	2.233E-09	1.699E-09
SSE	2.996E-07	9.830E-08	4.626E-08	2.881E-08	2.024E-08	1.090E-08	5.223E-09	3.261E-09	2.432E-09	1.887E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES .25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.686E-08	8.051E-09	5.067E-09	2.798E-09	1.135E-09	6.278E-10	3.993E-10	2.765E-10	2.026E-10	1.546E-10	1.216E-10
SSW	1.316E-08	6.443E-09	4.160E-09	2.351E-09	9.760E-10	5.470E-10	3.508E-10	2.442E-10	1.795E-10	1.372E-10	1.080E-10
SW	1.725E-08	8.478E-09	5.696E-09	3.248E-09	1.363E-09	7.667E-10	4.927E-10	3.434E-10	2.525E-10	1.931E-10	1.521E-10
WSW	2.019E-08	1.033E-08	6.498E-09	3.546E-09	1.422E-09	7.750E-10	4.880E-10	3.358E-10	2.451E-10	1.867E-10	1.522E-10
W	2.785E-08	1.366E-08	8.194E-09	4.562E-09	1.782E-09	9.363E-10	5.739E-10	3.876E-10	2.795E-10	2.111E-10	1.652E-10
WNW	2.835E-08	1.480E-08	9.606E-09	5.006E-09	1.911E-09	1.006E-09	6.187E-10	4.194E-10	3.034E-10	2.300E-10	1.805E-10
NW	2.615E-08	1.417E-08	8.852E-09	4.744E-09	1.772E-09	9.294E-10	5.710E-10	3.872E-10	2.805E-10	2.129E-10	1.675E-10
NNW	2.258E-08	1.175E-08	7.219E-09	3.748E-09	1.385E-09	7.254E-10	4.455E-10	3.021E-10	2.189E-10	1.662E-10	1.326E-10
N	2.314E-08	1.122E-08	6.940E-09	3.651E-09	1.387E-09	7.372E-10	4.570E-10	3.115E-10	2.262E-10	1.718E-10	1.350E-10
NNE	5.031E-08	2.298E-08	1.382E-08	7.254E-09	2.776E-09	1.477E-09	9.164E-10	6.246E-10	4.532E-10	3.478E-10	2.728E-10
NE	4.297E-08	2.033E-08	1.279E-08	7.090E-09	2.899E-09	1.607E-09	1.023E-09	7.090E-10	5.196E-10	3.964E-10	3.118E-10
ENE	2.496E-08	1.315E-08	8.603E-09	4.843E-09	1.982E-09	1.107E-09	7.092E-10	4.936E-10	3.629E-10	2.777E-10	2.189E-10
E	2.071E-08	1.147E-08	7.499E-09	4.157E-09	1.658E-09	9.153E-10	5.820E-10	4.034E-10	2.961E-10	2.264E-10	1.786E-10
ESE	2.303E-08	1.263E-08	8.144E-09	4.444E-09	1.741E-09	9.499E-10	5.995E-10	4.137E-10	3.029E-10	2.313E-10	1.824E-10
SE	1.963E-08	1.083E-08	7.004E-09	3.836E-09	1.508E-09	8.253E-10	5.220E-10	3.606E-10	2.642E-10	2.018E-10	1.592E-10
SSE	1.920E-08	1.009E-08	6.506E-09	3.598E-09	1.442E-09	7.957E-10	5.058E-10	3.504E-10	2.570E-10	1.964E-10	1.548E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.806E-11	4.663E-11	2.858E-11	1.510E-11	9.602E-12	6.883E-12	5.292E-12	4.267E-12	3.824E-12	3.584E-12	4.441E-12
SSW	8.711E-11	4.152E-11	2.560E-11	1.337E-11	8.481E-12	6.055E-12	4.632E-12	3.713E-12	3.089E-12	2.615E-12	2.369E-12
SW	1.226E-10	5.914E-11	3.592E-11	1.882E-11	1.185E-11	8.397E-12	6.361E-12	5.037E-12	4.136E-12	3.465E-12	3.046E-12
WSW	1.226E-10	5.785E-11	3.480E-11	1.810E-11	1.148E-11	8.187E-12	7.718E-12	7.168E-12	5.796E-12	4.697E-12	3.813E-12
W	1.329E-10	6.210E-11	3.764E-11	2.490E-11	2.010E-11	1.404E-11	9.906E-12	7.475E-12	5.814E-12	4.646E-12	3.794E-12
WNW	1.457E-10	6.989E-11	4.237E-11	3.565E-11	2.512E-11	1.624E-11	1.193E-11	8.965E-12	6.972E-12	5.577E-12	4.552E-12
NW	1.354E-10	6.496E-11	4.018E-11	2.164E-11	2.339E-11	1.767E-11	1.257E-11	8.770E-12	6.840E-12	5.439E-12	4.442E-12
NNW	1.071E-10	5.107E-11	3.151E-11	2.377E-11	2.411E-11	1.482E-11	1.045E-11	7.888E-12	6.138E-12	4.906E-12	4.002E-12
N	1.090E-10	5.266E-11	3.239E-11	1.737E-11	2.427E-11	2.053E-11	1.351E-11	9.541E-12	7.426E-12	5.936E-12	4.848E-12
NNE	2.197E-10	1.043E-10	6.361E-11	3.345E-11	2.139E-11	1.544E-11	1.194E-11	9.687E-12	8.120E-12	6.958E-12	6.095E-12
NE	2.513E-10	1.183E-10	7.318E-11	3.841E-11	2.434E-11	1.740E-11	1.324E-11	1.059E-11	8.756E-12	7.407E-12	6.401E-12
ENE	1.767E-10	8.391E-11	5.184E-11	2.753E-11	1.755E-11	1.274E-11	9.794E-12	7.956E-12	6.641E-12	5.700E-12	4.981E-12
E	1.443E-10	6.879E-11	4.256E-11	2.277E-11	1.453E-11	1.068E-11	8.220E-12	6.528E-12	5.310E-12	4.401E-12	3.703E-12
ESE	1.474E-10	7.026E-11	4.351E-11	2.334E-11	1.493E-11	1.101E-11	8.497E-12	6.767E-12	5.521E-12	4.572E-12	3.865E-12
SE	1.287E-10	6.135E-11	3.799E-11	2.039E-11	1.303E-11	9.594E-12	7.417E-12	5.989E-12	4.905E-12	4.284E-12	3.776E-12
SSE	1.250E-10	5.954E-11	3.689E-11	1.966E-11	1.264E-11	9.098E-12	7.207E-12	9.109E-12	9.610E-12	7.686E-12	6.242E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

Fermi COL A (using distances from RW Vent Stack)

Turbine Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********
SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.722E-09	1.279E-09	4.111E-10	2.054E-10	1.227E-10	5.003E-11	1.565E-11	6.972E-12	4.391E-12	3.972E-12
SSW	3.863E-09	1.091E-09	3.605E-10	1.819E-10	1.089E-10	4.457E-11	1.392E-11	6.133E-12	3.738E-12	2.664E-12
SW	5.226E-09	1.517E-09	5.060E-10	2.558E-10	1.533E-10	6.292E-11	1.952E-11	8.504E-12	5.072E-12	3.508E-12
WSW	6.039E-09	1.606E-09	5.037E-10	2.488E-10	1.515E-10	6.200E-11	1.887E-11	8.876E-12	6.802E-12	4.695E-12
W	7.794E-09	2.024E-09	5.960E-10	2.843E-10	1.669E-10	6.697E-11	2.560E-11	1.400E-11	7.537E-12	4.676E-12
WNW	8.717E-09	2.197E-09	6.423E-10	3.086E-10	1.823E-10	7.450E-11	3.246E-11	1.689E-11	9.054E-12	5.611E-12
NW	8.208E-09	2.058E-09	5.930E-10	2.852E-10	1.691E-10	6.960E-11	2.654E-11	1.716E-11	9.122E-12	5.485E-12
NNW	6.683E-09	1.617E-09	4.628E-10	2.226E-10	1.331E-10	5.483E-11	2.564E-11	1.555E-11	7.954E-12	4.936E-12
N	6.429E-09	1.602E-09	4.735E-10	2.299E-10	1.363E-10	5.617E-11	2.378E-11	1.872E-11	9.870E-12	5.975E-12
NNE	1.294E-08	3.194E-09	9.492E-10	4.621E-10	2.754E-10	1.119E-10	3.479E-11	1.563E-11	9.734E-12	6.983E-12
NE	1.193E-08	3.256E-09	1.053E-09	5.268E-10	3.145E-10	1.278E-10	3.988E-11	1.759E-11	1.065E-11	7.434E-12
ENE	7.943E-09	2.229E-09	7.291E-10	3.678E-10	2.207E-10	9.029E-11	2.850E-11	1.284E-11	7.980E-12	5.713E-12
E	6.896E-09	1.883E-09	5.994E-10	3.002E-10	1.801E-10	7.392E-11	2.350E-11	1.072E-11	6.547E-12	4.412E-12
ESE	7.497E-09	1.990E-09	6.186E-10	3.073E-10	1.839E-10	7.552E-11	2.408E-11	1.105E-11	6.787E-12	4.591E-12
SE	6.445E-09	1.722E-09	5.383E-10	2.680E-10	1.605E-10	6.594E-11	2.103E-11	9.641E-12	5.984E-12	4.280E-12
SSE	6.009E-09	1.634E-09	5.210E-10	2.606E-10	1.561E-10	6.402E-11	2.037E-11	9.287E-12	8.756E-12	7.721E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:27

0Fermi COL A (using distances from RW Vent Stack)

0Turbine Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+				UNDEPLETED	UNDEPLETED	DEPLETED	
	Site Boundary	S	.74	3.3E-07	3.3E-07	3.0E-07	5.1E-09
	Site Boundary	SSW	.76	2.4E-07	2.4E-07	2.2E-07	4.1E-09
	Site Boundary	SW	.93	2.0E-07	2.0E-07	1.9E-07	3.8E-09
	Site Boundary	WSW	.71	3.0E-07	3.0E-07	2.8E-07	7.0E-09
	Site Boundary	W	.57	5.1E-07	5.1E-07	4.7E-07	1.2E-08
	Site Boundary	WNW	.54	6.1E-07	6.0E-07	5.6E-07	1.4E-08
	Site Boundary	NW	.53	6.1E-07	6.1E-07	5.7E-07	1.3E-08
	Site Boundary	NNW	.53	5.9E-07	5.9E-07	5.5E-07	1.1E-08
	Site Boundary	N	.61	5.5E-07	5.5E-07	5.0E-07	9.0E-09
	Site Boundary	NNE	.88	6.0E-07	6.0E-07	5.4E-07	9.8E-09
	Site Boundary	NE	1.22	2.8E-07	2.8E-07	2.5E-07	4.6E-09
	Site Boundary	SSE	.74	3.4E-07	3.4E-07	3.1E-07	6.6E-09
	Residence	SSE	.96	2.1E-07	2.1E-07	1.9E-07	4.0E-09
	Residence	SSW	.93	1.6E-07	1.6E-07	1.5E-07	2.7E-09
	Residence	SW	1.03	1.7E-07	1.7E-07	1.6E-07	3.1E-09
	Residence	WSW	1.04	1.5E-07	1.5E-07	1.4E-07	3.2E-09
	Residence	W	.96	2.2E-07	2.2E-07	2.0E-07	5.0E-09

Residence	NW	.64	4.5E-07	4.5E-07	4.1E-07	1.1E-08
Residence	NW	1.02	1.9E-07	1.9E-07	1.8E-07	4.5E-09
Residence	NNW	1.15	1.5E-07	1.5E-07	1.3E-07	2.7E-09
Residence	NNE	1.25	3.0E-07	3.0E-07	2.7E-07	4.3E-09
Residence	NNE	1.18	3.4E-07	3.3E-07	3.0E-07	4.9E-09
Residence	NE	1.30	2.5E-07	2.5E-07	2.3E-07	4.0E-09
Garden	S	1.32	1.1E-07	1.1E-07	1.0E-07	1.5E-09
Garden	WSW	2.05	5.1E-08	5.1E-08	4.7E-08	7.4E-10
Garden	W	1.49	9.9E-08	9.9E-08	8.9E-08	1.8E-09
Garden	NW	.64	4.5E-07	4.5E-07	4.1E-07	1.1E-08
Garden	NNW	1.02	1.8E-07	1.8E-07	1.6E-07	3.6E-09
Garden	NNW	1.41	1.0E-07	1.0E-07	9.0E-08	1.6E-09
Garden	N	2.26	6.1E-08	6.1E-08	5.5E-08	5.7E-10
Garden	NNE	2.09	1.3E-07	1.3E-07	1.1E-07	1.3E-09
Garden	NE	2.18	1.1E-07	1.1E-07	1.0E-07	1.3E-09
Sheep	NNW	4.41	1.7E-08	1.7E-08	1.5E-08	1.4E-10
Sheep	NNE	4.42	4.2E-08	4.2E-08	3.7E-08	2.8E-10
Goat	WNW	2.27	5.5E-08	5.5E-08	4.9E-08	7.6E-10
Goat	NNW	3.04	3.0E-08	3.0E-08	2.6E-08	2.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

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00101111000
Fermi COL A (using distances from TB Vent Stack)
    9    7    6   15    5    3    0
   10. 101. 2.26   -8.   0.
    0    0    0    0    0    0    0
    0    0    5    3    5    1   10    6    8    7    5    2    3    0    0    0
    6    3   10   24    3    4    4    8    5    7   10   10   22   17   12    4
   29   35   46   42   42   56   63   59   62   68   58  100   97  133  117   53
   53   63  108  102  106  279  363  243  222  199  137  158  188  221  202  137
   72   44  131  145  141  326  422  320  203  300  174  199  146  208  198  149
   72   48   79  129  181  211  124  123   79  256  200  163  122  127  108  115
   12   14   15   39  116   57    7   10    9   68   79   20   42   33   30   37
   12    7    1    7   37    9    0    1    1   11   18    5    3    5    4    8
    0    0    0    0    2    0    0    0    0    2    1    0    0    0    0    0
    0    0    0    1    0    1    1    0    0    2    0    0    0    0    0    0
    3    2    2    1    0    1    1    4    4    3    5    4   15    9    6    1
   30   23   12   18    7   17   32   14   19   25   28   38   38   45   43   36
   35   23   30   19   18   40   75   61   46   50   57   58   78   70   55   61
   34   20   19   28   25   37   51   39   24   82   58   71   51   43   43   42
   20   19   15   28   35   22   21   12   18   70   84   28   36   25   22   32
    7   12    3   12   17   13    4    2    2   30   43   13   11   14    6    9
    6    1    2    4    7    1    0    0    0   10   25    2    1    2    2    0
    0    0    0    0    0    0    0    0    0    0    4    0    0    0    0    0
    0    0    0    0    0    1    0    0    1    2    1    0    0    0    0    0
    2    5    4    4    1    0    1    0    5    7    4   12   14   10    6   12
   27   24   12    6    5   15   14   15   22   29   37   48   48   57   44   27
   42   30   28   11   20   37   46   39   39   50   51   57   52   48   36   60
   29   23   36   29   19   28   34   32   27   56   77   36   48   39   31   41
   30   21   27   42   28   30   14    6   20   74   77   44   26   27   22   13
   10   22    6   14   18   12    5    7    5   35   48   16   16   20    9    8
    6    0    1   10   10    2    1    1    0    8   45    6    0    3    5    2
    0    0    0    2    1    0    0    0    0    0    6    0    0    0    0    0
    1    0    1    1    1    2    6    2    3    8    7    4    4    3    0    0
   48   29   26   12    6   11   11    8   11   31   36   56   77   71   55   42
  122  169   90   51   47   73   55   60   77   74  186  330  260  216  213  189
  144  180  251  131   93  158  162   93  133  194  391  431  290  256  271  290
  133  131  380  240  179  194  173  103  161  256  483  333  216  180  178  223
  222  133  330  324  240  195  102   92  126  392  585  237  160  152  115  128
   99  105   84  123  163   64   23   18   36  171  346   55   38   77   20   48
   31   34    4   43   79   30    9    2    3   76  125   21    6   11    2   15
    4   10    2    4   26    1    1    2    0    1   28    4    0    0    0    0
    2    0    3    3    4    0    2    1    8    9    4    6    5    3    4    2
   65   45   32   17   20   18   21   31   71   77  128  212  193  193  140   74
  167  225   74   48   54   98   83  114  202  239  464  525  306  352  408  258
  166  159  210  132  131  185  164  197  267  507  340  228  142  139  131  211
   92   60  117  126  123  182  150  142  231  452  158   57   47   58   47   59
   56   39   35   67   91   82   87   94  153  423  113   23   13   29   36   23
   13    6    9   13   55   35   11   14   34  121   42    2    3    6    6    8
    7    2    0    3   26   14    2    0    7   21   10    0    2    1    1    3
    1    0    0    3   10    0    0    2    1    3    3    0    1    2    0    0
    2    1    1    1    0    2    2    3    3    2    3    5    4    3    3    5
   48   32   15   10   12   13   13   40   68   99  134  203  221  265  162   93
  149   66   24   14   18   42   42   72  106  177  221  215  122  212  160  144
   98   35   11   10   32   47   66   93   67  141   26    6    7   14   15   47
   13    9    5   12   20   36   37   57   47   98   14    5    9    2    6    5
    8    3    0    8   16   16   22   32   41   81    9    5    1    6    2    6
    1    0    0    2    8    5    7    7   15   14    2    1    0    1    0    0
    0    0    0    0    8    0    1    3    2    4    0    5    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    2    0    0    0
    0    0    0    0    0    0    0    1    0    0    1    2    2    0    2    0
   23   14    5    1    1    7    9    7   21   23   49  128  223  333  151   77
   63   12    5    4   10   27   37   21   17   60   49   81   49  184   87   91
   20   10    2    2   10   27   37   31   18   29   11    2    2    3    1   19
    4    0    0    2   10   18   22   24    9   15    5    0    0    1    1    0
    1    0    0    0    8   13   20   18    5   16    7    5    0    0    0    0
    0    0    0    0    2    1    3    5    0    0    1    1    0    0    0    0
    0    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
  101. 0.75  2.5  4.5  6.5  8.5 11.5 14.5 18.5 23.5
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
8046780467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
   12   11    9    2    2
Site Boundary
    1 1221    2 1249    3 1560    4 1199    5 1003    6  897    7  879    8  879
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    9 1016   10 1470   11 1924   16 1221
Residence
   16 1568    2 1535    3 1719    4 1739    5 1631    7 1067    7 1674    8 1880
   10 2069   10 1958   11 2052
Garden
    1 2157    4 3363    5 2482    7 1070    8 1717    8 2315    9 3773   10 3416
   11 3472
Sheep
    8 7133   10 7177
Goat
    6 3682    8 4921
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
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1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:29

 PRINTOUT OF INPUT CARDS
0    1     00101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL A (using distances from TB Vent Stack)
     3         9    7    6   15    5    3    0
     4       10.00 101.00   2.26  -8.00    .00
     5        .000   .000   .000   .000   .000   .000   .000
     6        .000   .000  5.000  3.000  5.000  1.000 10.000  6.000  8.000  7.000  5.000  2.000  3.000   .000   .000   .000
     6       6.000  3.000 10.000 24.000  3.000  4.000  4.000  8.000  5.000  7.000 10.000 10.000 22.000 17.000 12.000  4.000
     6      29.000 35.000 46.000 42.000 42.000 56.000 63.000 59.000 62.000 68.000 58.000100.000 97.000133.000117.000 53.000
     6      53.000 63.000108.000102.000106.000279.000363.000243.000222.000199.000137.000158.000188.000221.000202.000137.000
     6      72.000 44.000131.000145.000141.000326.000422.000320.000203.000300.000174.000199.000146.000208.000198.000149.000
     6      72.000 48.000 79.000129.000181.000211.000124.000123.000 79.000256.000200.000163.000122.000127.000108.000115.000
     6      12.000 14.000 15.000 39.000116.000 57.000  7.000 10.000  9.000 68.000 79.000 20.000 42.000 33.000 30.000 37.000
     6      12.000  7.000  1.000  7.000 37.000  9.000   .000  1.000  1.000 11.000 18.000  5.000  3.000  5.000  4.000  8.000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000
     6        .000   .000   .000  1.000   .000  1.000  1.000   .000   .000  2.000   .000   .000   .000   .000   .000   .000
     6       3.000  2.000  2.000  1.000   .000  1.000  1.000  4.000  4.000  3.000  5.000  4.000 15.000  9.000  6.000  1.000
     6      30.000 23.000 12.000 18.000  7.000 17.000 32.000 14.000 19.000 25.000 28.000 38.000 38.000 45.000 43.000 36.000
     6      35.000 23.000 30.000 19.000 18.000 40.000 75.000 61.000 46.000 50.000 57.000 58.000 78.000 70.000 55.000 61.000
     6      34.000 20.000 19.000 28.000 25.000 37.000 51.000 39.000 24.000 82.000 58.000 71.000 51.000 43.000 43.000 42.000
     6      20.000 19.000 15.000 28.000 35.000 22.000 21.000 12.000 18.000 70.000 84.000 28.000 36.000 25.000 22.000 32.000
     6       7.000 12.000  3.000 12.000 17.000 13.000  4.000  2.000  2.000 30.000 43.000 13.000 11.000 14.000  6.000  9.000
     6       6.000  1.000  2.000  4.000  7.000  1.000   .000   .000   .000 10.000 25.000  2.000  1.000  2.000  2.000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  1.000   .000   .000   .000   .000   .000
     6       2.000  5.000  4.000  4.000  1.000   .000  1.000   .000  5.000  7.000  4.000 12.000 14.000 10.000  6.000 12.000
     6      27.000 24.000 12.000  6.000  5.000 15.000 14.000 15.000 22.000 29.000 37.000 48.000 48.000 57.000 44.000 27.000
     6      42.000 30.000 28.000 11.000 20.000 37.000 46.000 39.000 39.000 50.000 51.000 57.000 52.000 48.000 36.000 60.000
     6      29.000 23.000 36.000 29.000 19.000 28.000 34.000 32.000 27.000 56.000 77.000 36.000 48.000 39.000 31.000 41.000
     6      30.000 21.000 27.000 42.000 28.000 30.000 14.000  6.000 20.000 74.000 77.000 44.000 26.000 27.000 22.000 13.000
     6      10.000 22.000  6.000 14.000 18.000 12.000  5.000  7.000  5.000 35.000 48.000 16.000 16.000 20.000  9.000  8.000
     6       6.000   .000  1.000 10.000 10.000  2.000  1.000  1.000   .000  8.000 45.000  6.000   .000  3.000  5.000  2.000
     6        .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000  6.000   .000   .000   .000   .000   .000
     6       1.000   .000  1.000  1.000  1.000  2.000  6.000  2.000  3.000  8.000  7.000  4.000  4.000  3.000   .000   .000
     6      48.000 29.000 26.000 12.000  6.000 11.000 11.000  8.000 11.000 31.000 36.000 56.000 77.000 71.000 55.000 42.000
     6     122.000169.000 90.000 51.000 47.000 73.000 55.000 60.000 77.000 74.000186.000330.000260.000216.000213.000189.000
     6     144.000180.000251.000131.000 93.000158.000162.000 93.000133.000194.000391.000431.000290.000256.000271.000290.000
     6     133.000131.000380.000240.000179.000194.000173.000103.000161.000256.000483.000333.000216.000180.000178.000223.000
     6     222.000133.000330.000324.000240.000195.000102.000 92.000126.000392.000585.000237.000160.000152.000115.000128.000
     6      99.000105.000 84.000123.000163.000 64.000 23.000 18.000 36.000171.000346.000 55.000 38.000 77.000 20.000 48.000
     6      31.000 34.000  4.000 43.000 79.000 30.000  9.000  2.000  3.000 76.000125.000 21.000  6.000 11.000  2.000 15.000
     6       4.000 10.000  2.000  4.000 26.000  1.000  1.000  2.000   .000  1.000 28.000  4.000   .000   .000   .000   .000
     6       2.000   .000  3.000  3.000  4.000   .000  2.000  1.000  8.000  9.000  4.000  6.000  5.000  3.000  4.000  2.000
     6      65.000 45.000 32.000 17.000 20.000 18.000 21.000 31.000 71.000 77.000128.000212.000193.000193.000140.000 74.000
     6     167.000225.000 74.000 48.000 54.000 98.000 83.000114.000202.000239.000464.000525.000306.000352.000408.000258.000
     6     166.000159.000210.000132.000131.000185.000164.000197.000267.000507.000340.000228.000142.000139.000131.000211.000
     6      92.000 60.000117.000126.000123.000182.000150.000142.000231.000452.000158.000 57.000 47.000 58.000 47.000 59.000
     6      56.000 39.000 35.000 67.000 91.000 82.000 87.000 94.000153.000423.000113.000 23.000 13.000 29.000 36.000 23.000
     6      13.000  6.000  9.000 13.000 55.000 35.000 11.000 14.000 34.000121.000 42.000  2.000  3.000  6.000  6.000  8.000
     6       7.000  2.000   .000  3.000 26.000 14.000  2.000   .000  7.000 21.000 10.000   .000  2.000  1.000  1.000  3.000
     6       1.000   .000   .000  3.000 10.000   .000   .000  2.000  1.000  3.000  3.000   .000  1.000  2.000   .000   .000
     6       2.000  1.000  1.000  1.000   .000  2.000  2.000  3.000  3.000  2.000  3.000  5.000  4.000  3.000  3.000  5.000
     6      48.000 32.000 15.000 10.000 12.000 13.000 13.000 40.000 68.000 99.000134.000203.000221.000265.000162.000 93.000
     6     149.000 66.000 24.000 14.000 18.000 42.000 42.000 72.000106.000177.000221.000215.000122.000212.000160.000144.000
     6      98.000 35.000 11.000 10.000 32.000 47.000 66.000 93.000 67.000141.000 26.000  6.000  7.000 14.000 15.000 47.000
     6      13.000  9.000  5.000 12.000 20.000 36.000 37.000 57.000 47.000 98.000 14.000  5.000  9.000  2.000  6.000  5.000
     6       8.000  3.000   .000  8.000 16.000 16.000 22.000 32.000 41.000 81.000  9.000  5.000  1.000  6.000  2.000  6.000
     6       1.000   .000   .000  2.000  8.000  5.000  7.000  7.000 15.000 14.000  2.000  1.000   .000  1.000   .000   .000
     6        .000   .000   .000   .000  8.000   .000  1.000  3.000  2.000  4.000   .000  5.000  1.000   .000   .000   .000
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     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  2.000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  2.000   .000  2.000   .000
     6      23.000 14.000  5.000  1.000  1.000  7.000  9.000  7.000 21.000 23.000 49.000128.000223.000333.000151.000 77.000
     6      63.000 12.000  5.000  4.000 10.000 27.000 37.000 21.000 17.000 60.000 49.000 81.000 49.000184.000 87.000 91.000
     6      20.000 10.000  2.000  2.000 10.000 27.000 37.000 31.000 18.000 29.000 11.000  2.000  2.000  3.000  1.000 19.000
     6       4.000   .000   .000  2.000 10.000 18.000 22.000 24.000  9.000 15.000  5.000   .000   .000  1.000  1.000   .000
     6       1.000   .000   .000   .000  8.000 13.000 20.000 18.000  5.000 16.000  7.000  5.000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000  1.000  3.000  5.000   .000   .000  1.000  1.000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     7        101.   .750  2.500  4.500  6.500  8.500 11.500 14.500 18.500 23.500   .000   .000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
    10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
    10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
    11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
    10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
    11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
    12         12    11     9     2     2
    13      Site Boundary
    14        1 1221.0  2 1249.0  3 1560.0  4 1199.0  5 1003.0  6  897.0  7  879.0  8  879.0

  9 1016.0 10 1470.0 11 1924.0 16 1221.0
    13      Residence
    14       16 1568.0  2 1535.0  3 1719.0  4 1739.0  5 1631.0  7 1067.0  7 1674.0  8 1880.0

 10 2069.0 10 1958.0 11 2052.0
    13      Garden
    14        1 2157.0  4 3363.0  5 2482.0  7 1070.0  8 1717.0  8 2315.0  9 3773.0 10 3416.0

 11 3472.0
    13      Sheep
    14        8 7133.0 10 7177.0
    13      Goat
    14        6 3682.0  8 4921.0
    15      Ground Level/Radwaste Bldg
    16         .000   .000   10.0     .0  350.0   10.0   .00
    17          0    0    0
    15      Reactor Bldg/Fuel Bldg Stack
    16       17.780  2.400   52.6   48.0     .0   52.6   .00
    17          0    0    0
    15      Turbine Bldg Stack
    16       17.780  1.950   71.3   52.0     .0   71.3   .00
    17          0    0    0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:29

     Fermi COL A (using distances from TB Vent Stack)

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)        N     NNE     NE     ENE      E     ESE     SE     SSE      S     SSW     SW     WSW      W     WNW     NW     NNW  TOTAL
   .34          .000   .000   .010   .006   .010   .002   .020   .012   .016   .014   .010   .004   .006   .000   .000   .000   .110
  1.12          .012   .006   .020   .048   .006   .008   .008   .016   .010   .014   .020   .020   .044   .034   .024   .008   .298
  2.01          .058   .070   .092   .084   .084   .112   .126   .118   .124   .136   .116   .200   .194   .266   .234   .106  2.117
  2.91          .106   .126   .216   .204   .212   .557   .725   .485   .443   .397   .274   .316   .375   .441   .403   .274  5.554
  3.80          .144   .088   .262   .290   .282   .651   .843   .639   .405   .599   .347   .397   .292   .415   .395   .298  6.347
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5.14	.144	.096	.158	.258	.361	.421	.248	.246	.158	.511	.399	.326	.244	.254	.216	.230	4.268
6.48	.024	.028	.030	.078	.232	.114	.014	.020	.018	.136	.158	.040	.084	.066	.060	.074	1.174
8.27	.024	.014	.002	.014	.074	.018	.000	.002	.002	.022	.036	.010	.006	.010	.008	.016	.258
10.51	.000	.000	.000	.000	.004	.000	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.010
TOTAL	.51	.43	.79	.98	1.26	1.88	1.98	1.54	1.18	1.83	1.36	1.31	1.24	1.49	1.34	1.00	20.14

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.002	.000	.002	.002	.000	.000	.004	.000	.000	.000	.000	.000	.000	.010
1.12	.006	.004	.004	.002	.000	.002	.002	.008	.008	.006	.010	.008	.030	.018	.012	.002	.122
2.01	.060	.046	.024	.036	.014	.034	.064	.028	.038	.050	.056	.076	.076	.090	.086	.072	.849
2.91	.070	.046	.060	.038	.036	.080	.150	.122	.092	.100	.114	.116	.156	.140	.110	.122	1.550
3.80	.068	.040	.038	.056	.050	.074	.102	.078	.048	.164	.116	.142	.102	.086	.086	.084	1.332
5.14	.040	.038	.030	.056	.070	.044	.042	.024	.036	.140	.168	.056	.072	.050	.044	.064	.973
6.48	.014	.024	.006	.024	.034	.026	.008	.004	.004	.060	.086	.026	.022	.028	.012	.018	.395
8.27	.012	.002	.004	.008	.014	.002	.000	.000	.000	.020	.050	.004	.002	.004	.004	.000	.126
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008	.000	.000	.000	.000	.000	.008
TOTAL	.27	.20	.17	.22	.22	.26	.37	.26	.23	.54	.61	.43	.46	.42	.35	.36	5.36

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.002	.000	.000	.000	.000	.000	.010
1.12	.004	.010	.008	.008	.002	.000	.002	.000	.010	.014	.008	.024	.028	.020	.012	.024	.174
2.01	.054	.048	.024	.012	.010	.030	.028	.030	.044	.058	.074	.096	.096	.114	.088	.054	.859
2.91	.084	.060	.056	.022	.040	.074	.092	.078	.078	.100	.102	.114	.104	.096	.072	.120	1.290
3.80	.058	.046	.072	.058	.038	.056	.068	.064	.054	.112	.154	.072	.096	.078	.062	.082	1.168
5.14	.060	.042	.054	.084	.056	.060	.028	.012	.040	.148	.154	.088	.052	.054	.044	.026	1.001
6.48	.020	.044	.012	.028	.036	.024	.010	.014	.010	.070	.096	.032	.032	.040	.018	.016	.501
8.27	.012	.000	.002	.020	.020	.004	.002	.002	.000	.016	.090	.012	.000	.006	.010	.004	.200
10.51	.000	.000	.000	.004	.002	.000	.000	.000	.000	.000	.012	.000	.000	.000	.000	.000	.018
TOTAL	.29	.25	.23	.24	.20	.25	.23	.20	.24	.52	.69	.44	.41	.41	.31	.33	5.22

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.002	.000	.002	.002	.002	.004	.012	.004	.006	.016	.014	.008	.008	.006	.000	.000	.086
1.12	.096	.058	.052	.024	.012	.022	.022	.016	.022	.062	.072	.112	.154	.142	.110	.084	1.058
2.01	.244	.338	.180	.102	.094	.146	.110	.120	.154	.148	.371	.659	.519	.431	.425	.377	4.418
2.91	.288	.359	.501	.262	.186	.316	.324	.186	.266	.387	.781	.861	.579	.511	.541	.579	6.926
3.80	.266	.262	.759	.479	.357	.387	.346	.206	.322	.511	.965	.665	.431	.359	.355	.445	7.116
5.14	.443	.266	.659	.647	.479	.389	.204	.184	.252	.783	1.168	.473	.320	.304	.230	.256	7.056
6.48	.198	.210	.168	.246	.326	.128	.046	.036	.072	.342	.691	.110	.076	.154	.040	.096	2.936
8.27	.062	.068	.008	.086	.158	.060	.018	.004	.006	.152	.250	.042	.012	.022	.004	.030	.981
10.51	.008	.020	.004	.008	.052	.002	.002	.004	.000	.002	.056	.008	.000	.000	.000	.000	.166
TOTAL	1.61	1.58	2.33	1.86	1.67	1.45	1.08	.76	1.10	2.40	4.37	2.94	2.10	1.93	1.71	1.87	30.74

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.000	.006	.006	.008	.000	.004	.002	.016	.018	.008	.012	.010	.006	.008	.004	.112
1.12	.130	.090	.064	.034	.040	.036	.042	.062	.142	.154	.256	.423	.385	.385	.280	.148	2.670
2.01	.334	.449	.148	.096	.108	.196	.166	.228	.403	.477	.927	1.048	.611	.703	.815	.515	7.224
2.91	.332	.318	.419	.264	.262	.369	.328	.393	.533	1.013	.679	.455	.284	.278	.262	.421	6.608
3.80	.184	.120	.234	.252	.246	.363	.300	.284	.461	.903	.316	.114	.094	.116	.094	.118	4.196
5.14	.112	.078	.070	.134	.182	.164	.174	.188	.306	.845	.226	.046	.026	.058	.072	.046	2.724
6.48	.026	.012	.018	.026	.110	.070	.022	.028	.068	.242	.084	.004	.006	.012	.012	.016	.755
8.27	.014	.004	.000	.006	.052	.028	.004	.000	.014	.042	.020	.000	.004	.002	.002	.006	.198
10.51	.002	.000	.000	.006	.020	.000	.000	.004	.002	.006	.006	.000	.002	.004	.000	.000	.052
TOTAL	1.14	1.07	.96	.82	1.03	1.23	1.04	1.19	1.95	3.70	2.52	2.10	1.42	1.56	1.54	1.27	24.54

OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

OUMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.004	.002	.002	.002	.000	.004	.004	.006	.006	.004	.006	.010	.008	.006	.006	.010	.080

1.12	.096	.064	.030	.020	.024	.026	.026	.080	.136	.198	.268	.405	.441	.529	.324	.186	2.852
2.01	.298	.132	.048	.028	.036	.084	.084	.144	.212	.353	.441	.429	.244	.423	.320	.288	3.563
2.91	.196	.070	.022	.020	.064	.094	.132	.186	.134	.282	.052	.012	.014	.028	.030	.094	1.428
3.80	.026	.018	.010	.024	.040	.072	.074	.114	.094	.196	.028	.010	.018	.004	.012	.010	.749
5.14	.016	.006	.000	.016	.032	.032	.044	.064	.082	.162	.018	.010	.002	.012	.004	.012	.511
6.48	.002	.000	.000	.004	.016	.010	.014	.014	.030	.028	.004	.002	.000	.002	.000	.000	.126
8.27	.000	.000	.000	.000	.016	.000	.002	.006	.004	.008	.000	.010	.002	.000	.000	.000	.048
10.51	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.004	.004	.000	.000	.000	.010
TOTAL	.64	.29	.11	.11	.23	.32	.38	.61	.70	1.23	.82	.89	.73	1.00	.69	.60	9.37

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

0UMAX (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
.34	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.004	.000	.004	.000	.016
1.12	.046	.028	.010	.002	.002	.014	.018	.014	.042	.046	.098	.256	.445	.665	.302	.154	2.141
2.01	.126	.024	.010	.008	.020	.054	.074	.042	.034	.120	.098	.162	.098	.367	.174	.182	1.592
2.91	.040	.020	.004	.004	.020	.054	.074	.062	.036	.058	.022	.004	.004	.006	.002	.038	.447
3.80	.008	.000	.000	.004	.020	.036	.044	.048	.018	.030	.010	.000	.000	.002	.002	.000	.222
5.14	.002	.000	.000	.000	.016	.026	.040	.036	.010	.032	.014	.010	.000	.000	.000	.000	.186
6.48	.000	.000	.000	.000	.004	.002	.006	.010	.000	.000	.002	.002	.000	.000	.000	.000	.026
8.27	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
10.51	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002
TOTAL	.22	.07	.02	.02	.08	.19	.26	.21	.14	.29	.25	.44	.55	1.04	.48	.37	4.63

TOTAL HOURS CONSIDERED ARE 50072
0WIND MEASURED AT 10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
FREQUENCY:	4.7	3.9	4.6	4.2	4.7	5.6	5.3	4.8	5.5	10.5	10.6	8.5	6.9	7.8	6.4	5.8	100.0

0OVERALL WIND SPEED FREQUENCY

MAX WIND SPEED (M/S):	.335	1.118	2.012	2.906	3.800	5.141	6.482	8.270	10.505
AVE WIND SPEED (M/S):	.168	.726	1.565	2.459	3.353	4.470	5.812	7.376	9.388
WIND SPEED FREQUENCY:	.42	9.31	20.62	23.80	21.13	16.72	5.91	1.81	.27

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSESS IS .447
0DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.	1609.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.	3219.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.	4828.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	0.	0.	0.	0.	0.	0.	0.
DISTANCE	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.	6437.
ELEVATION	0.	2.	4.	5.	7.	8.	7.	5.	4.	4.	0.	0.	0.	0.	0.	0.
DISTANCE	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.	8047.
ELEVATION	0.	2.	4.	8.	7.	8.	8.	7.	5.	5.	0.	0.	0.	0.	0.	0.
DISTANCE	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.	80467.
ELEVATION	45.	37.	37.	68.	151.	174.	121.	159.	129.	22.	22.	22.	0.	7.	14.	68.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500

S	4.212E-05	1.224E-05	5.968E-06	2.845E-06	1.070E-06	5.615E-07	3.493E-07	2.408E-07	1.777E-07	1.377E-07	1.106E-07
SSW	2.990E-05	8.693E-06	4.257E-06	2.027E-06	7.586E-07	3.959E-07	2.451E-07	1.682E-07	1.237E-07	9.553E-08	7.650E-08
SW	2.490E-05	7.149E-06	3.497E-06	1.661E-06	6.193E-07	3.216E-07	1.982E-07	1.355E-07	9.926E-08	7.638E-08	6.096E-08
WSW	1.860E-05	5.285E-06	2.573E-06	1.220E-06	4.547E-07	2.362E-07	1.456E-07	9.955E-08	7.295E-08	5.616E-08	4.484E-08
W	2.015E-05	5.745E-06	2.796E-06	1.328E-06	4.974E-07	2.597E-07	1.608E-07	1.104E-07	8.116E-08	6.266E-08	5.018E-08
WNW	2.792E-05	7.916E-06	3.832E-06	1.820E-06	6.839E-07	3.582E-07	2.225E-07	1.532E-07	1.130E-07	8.746E-08	7.020E-08
NW	2.942E-05	8.268E-06	3.981E-06	1.889E-06	7.115E-07	3.736E-07	2.326E-07	1.605E-07	1.185E-07	9.191E-08	7.388E-08
NNW	3.201E-05	9.137E-06	4.425E-06	2.105E-06	7.945E-07	4.181E-07	2.607E-07	1.802E-07	1.333E-07	1.035E-07	8.324E-08
N	4.464E-05	1.291E-05	6.302E-06	3.000E-06	1.130E-06	5.929E-07	3.689E-07	2.544E-07	1.879E-07	1.456E-07	1.170E-07
NNE	7.320E-05	2.121E-05	1.036E-05	4.931E-06	1.854E-06	9.724E-07	6.046E-07	4.166E-07	3.074E-07	2.381E-07	1.912E-07
NE	8.036E-05	2.333E-05	1.140E-05	5.430E-06	2.038E-06	1.067E-06	6.621E-07	4.555E-07	3.356E-07	2.596E-07	2.082E-07
ENE	9.779E-05	2.840E-05	1.384E-05	6.605E-06	2.491E-06	1.309E-06	8.159E-07	5.633E-07	4.164E-07	3.230E-07	2.597E-07
E	9.458E-05	2.735E-05	1.326E-05	6.333E-06	2.396E-06	1.264E-06	7.898E-07	5.468E-07	4.051E-07	3.150E-07	2.538E-07
ESE	1.214E-04	3.511E-05	1.698E-05	8.117E-06	3.083E-06	1.632E-06	1.024E-06	7.107E-07	5.279E-07	4.113E-07	3.321E-07
SE	7.993E-05	2.313E-05	1.123E-05	5.359E-06	2.028E-06	1.069E-06	6.683E-07	4.627E-07	3.428E-07	2.665E-07	2.147E-07
SSE	5.915E-05	1.711E-05	8.318E-06	3.968E-06	1.497E-06	7.872E-07	4.908E-07	3.391E-07	2.507E-07	1.946E-07	1.566E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.136E-08	4.677E-08	3.031E-08	1.743E-08	1.184E-08	8.802E-09	6.917E-09	5.648E-09	4.742E-09	4.067E-09	3.546E-09
SSW	6.301E-08	3.189E-08	2.049E-08	1.164E-08	7.844E-09	5.790E-09	4.525E-09	3.677E-09	3.075E-09	2.627E-09	2.284E-09
SW	5.007E-08	2.505E-08	1.595E-08	8.949E-09	5.975E-09	4.379E-09	3.403E-09	2.752E-09	2.292E-09	1.951E-09	1.691E-09
WSW	3.685E-08	1.849E-08	1.180E-08	6.646E-09	4.452E-09	3.271E-09	2.547E-09	2.064E-09	1.722E-09	1.468E-09	1.274E-09
W	4.134E-08	2.093E-08	1.345E-08	7.650E-09	5.158E-09	3.809E-09	2.979E-09	2.422E-09	2.027E-09	1.733E-09	1.507E-09
WNW	5.795E-08	2.962E-08	1.917E-08	1.102E-08	7.488E-09	5.565E-09	4.375E-09	3.574E-09	3.002E-09	2.575E-09	2.247E-09
NW	6.109E-08	3.143E-08	2.045E-08	1.183E-08	8.083E-09	6.032E-09	4.757E-09	3.897E-09	3.281E-09	2.822E-09	2.466E-09
NNW	6.888E-08	3.550E-08	2.312E-08	1.339E-08	9.147E-09	6.824E-09	5.380E-09	4.405E-09	3.707E-09	3.186E-09	2.784E-09
N	9.663E-08	4.948E-08	3.206E-08	1.844E-08	1.252E-08	9.303E-09	7.307E-09	5.964E-09	5.006E-09	4.292E-09	3.741E-09
NNE	1.579E-07	8.075E-08	5.228E-08	3.002E-08	2.038E-08	1.513E-08	1.188E-08	9.690E-09	8.130E-09	6.968E-09	6.072E-09
NE	1.718E-07	8.745E-08	5.643E-08	3.226E-08	2.183E-08	1.617E-08	1.267E-08	1.032E-08	8.649E-09	7.404E-09	6.446E-09
ENE	2.147E-07	1.103E-07	7.165E-08	4.135E-08	2.817E-08	2.097E-08	1.650E-08	1.349E-08	1.134E-08	9.734E-09	8.496E-09
E	2.102E-07	1.088E-07	7.111E-08	4.140E-08	2.838E-08	2.123E-08	1.678E-08	1.376E-08	1.161E-08	9.990E-09	8.740E-09
ESE	2.756E-07	1.437E-07	9.437E-08	5.533E-08	3.811E-08	2.862E-08	2.269E-08	1.866E-08	1.577E-08	1.360E-08	1.192E-08
SE	1.778E-07	9.200E-08	6.009E-08	3.495E-08	2.394E-08	1.790E-08	1.414E-08	1.159E-08	9.770E-09	8.407E-09	7.352E-09
SSE	1.295E-07	6.668E-08	4.340E-08	2.512E-08	1.715E-08	1.279E-08	1.008E-08	8.257E-09	6.949E-09	5.972E-09	5.218E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT
SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.973E-06	1.239E-06	3.625E-07	1.805E-07	1.115E-07	4.936E-08	1.781E-08	8.859E-09	5.665E-09	4.074E-09
SSW	4.251E-06	8.791E-07	2.546E-07	1.257E-07	7.714E-08	3.374E-08	1.192E-08	5.832E-09	3.690E-09	2.633E-09
SW	3.493E-06	7.185E-07	2.060E-07	1.009E-07	6.150E-08	2.657E-08	9.183E-09	4.414E-09	2.763E-09	1.956E-09
WSW	2.574E-06	5.276E-07	1.513E-07	7.415E-08	4.523E-08	1.960E-08	6.817E-09	3.296E-09	2.072E-09	1.471E-09
W	2.799E-06	5.763E-07	1.670E-07	8.246E-08	5.060E-08	2.214E-08	7.832E-09	3.837E-09	2.431E-09	1.736E-09
WNW	3.845E-06	7.916E-07	2.310E-07	1.148E-07	7.078E-08	3.127E-08	1.126E-08	5.602E-09	3.585E-09	2.580E-09
NW	4.004E-06	8.230E-07	2.413E-07	1.204E-07	7.448E-08	3.314E-08	1.208E-08	6.069E-09	3.908E-09	2.826E-09
NNW	4.441E-06	9.184E-07	2.705E-07	1.353E-07	8.391E-08	3.741E-08	1.367E-08	6.866E-09	4.418E-09	3.192E-09

N	6.304E-06	1.307E-06	3.828E-07	1.908E-07	1.179E-07	5.221E-08	1.884E-08	9.364E-09	5.983E-09	4.299E-09
NNE	1.036E-05	2.146E-06	6.275E-07	3.122E-07	1.928E-07	8.524E-08	3.068E-08	1.523E-08	9.720E-09	6.980E-09
NE	1.140E-05	2.360E-06	6.874E-07	3.409E-07	2.100E-07	9.240E-08	3.300E-08	1.628E-08	1.036E-08	7.418E-09
ENE	1.386E-05	2.880E-06	8.465E-07	4.228E-07	2.618E-07	1.163E-07	4.223E-08	2.110E-08	1.353E-08	9.751E-09
E	1.331E-05	2.767E-06	8.189E-07	4.112E-07	2.558E-07	1.146E-07	4.221E-08	2.135E-08	1.380E-08	1.001E-08
ESE	1.707E-05	3.557E-06	1.061E-06	5.357E-07	3.347E-07	1.511E-07	5.635E-08	2.878E-08	1.871E-08	1.362E-08
SE	1.126E-05	2.342E-06	6.930E-07	3.480E-07	2.164E-07	9.689E-08	3.564E-08	1.800E-08	1.162E-08	8.420E-09
SSE	8.339E-06	1.730E-06	5.092E-07	2.546E-07	1.578E-07	7.029E-08	2.564E-08	1.287E-08	8.281E-09	5.982E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.206E-05	1.220E-05	5.945E-06	2.830E-06	1.062E-06	5.556E-07	3.447E-07	2.370E-07	1.745E-07	1.348E-07	1.080E-07
SSW	2.987E-05	8.673E-06	4.243E-06	2.017E-06	7.534E-07	3.923E-07	2.423E-07	1.659E-07	1.217E-07	9.378E-08	7.492E-08
SW	2.487E-05	7.132E-06	3.484E-06	1.653E-06	6.147E-07	3.184E-07	1.957E-07	1.335E-07	9.752E-08	7.485E-08	5.960E-08
WSW	1.858E-05	5.271E-06	2.563E-06	1.214E-06	4.512E-07	2.338E-07	1.437E-07	9.803E-08	7.165E-08	5.501E-08	4.382E-08
W	2.013E-05	5.732E-06	2.786E-06	1.322E-06	4.940E-07	2.573E-07	1.589E-07	1.088E-07	7.986E-08	6.152E-08	4.915E-08
WNW	2.789E-05	7.899E-06	3.820E-06	1.812E-06	6.794E-07	3.551E-07	2.201E-07	1.512E-07	1.113E-07	8.595E-08	6.884E-08
NW	2.938E-05	8.244E-06	3.964E-06	1.878E-06	7.055E-07	3.694E-07	2.293E-07	1.578E-07	1.162E-07	8.989E-08	7.206E-08
NNW	3.196E-05	9.110E-06	4.406E-06	2.093E-06	7.877E-07	4.133E-07	2.570E-07	1.771E-07	1.306E-07	1.011E-07	8.111E-08
N	4.457E-05	1.287E-05	6.271E-06	2.981E-06	1.119E-06	5.852E-07	3.630E-07	2.495E-07	1.836E-07	1.419E-07	1.136E-07
NNE	7.310E-05	2.116E-05	1.032E-05	4.904E-06	1.839E-06	9.618E-07	5.964E-07	4.099E-07	3.017E-07	2.330E-07	1.866E-07
NE	8.025E-05	2.326E-05	1.135E-05	5.399E-06	2.021E-06	1.054E-06	6.525E-07	4.476E-07	3.289E-07	2.536E-07	2.028E-07
ENE	9.763E-05	2.830E-05	1.377E-05	6.560E-06	2.465E-06	1.291E-06	8.019E-07	5.518E-07	4.064E-07	3.142E-07	2.517E-07
E	9.441E-05	2.725E-05	1.319E-05	6.285E-06	2.369E-06	1.245E-06	7.750E-07	5.345E-07	3.945E-07	3.056E-07	2.453E-07
ESE	1.212E-04	3.499E-05	1.689E-05	8.063E-06	3.052E-06	1.610E-06	1.006E-06	6.964E-07	5.156E-07	4.004E-07	3.222E-07
SE	7.980E-05	2.305E-05	1.117E-05	5.323E-06	2.007E-06	1.055E-06	6.570E-07	4.532E-07	3.346E-07	2.592E-07	2.081E-07
SSE	5.906E-05	1.706E-05	8.280E-06	3.944E-06	1.483E-06	7.777E-07	4.834E-07	3.329E-07	2.454E-07	1.899E-07	1.523E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.898E-08	4.496E-08	2.876E-08	1.613E-08	1.069E-08	7.754E-09	5.949E-09	4.745E-09	3.893E-09	3.264E-09	2.783E-09
SSW	6.157E-08	3.080E-08	1.956E-08	1.085E-08	7.146E-09	5.154E-09	3.937E-09	3.128E-09	2.558E-09	2.138E-09	1.818E-09
SW	4.882E-08	2.411E-08	1.517E-08	8.300E-09	5.411E-09	3.875E-09	2.944E-09	2.330E-09	1.899E-09	1.583E-09	1.344E-09
WSW	3.592E-08	1.779E-08	1.122E-08	6.165E-09	4.034E-09	2.899E-09	2.210E-09	1.755E-09	1.435E-09	1.201E-09	1.023E-09
W	4.040E-08	2.023E-08	1.286E-08	7.160E-09	4.731E-09	3.427E-09	2.631E-09	2.101E-09	1.728E-09	1.453E-09	1.243E-09
WNW	5.671E-08	2.868E-08	1.837E-08	1.035E-08	6.897E-09	5.030E-09	3.882E-09	3.115E-09	2.571E-09	2.168E-09	1.860E-09
NW	5.943E-08	3.018E-08	1.939E-08	1.095E-08	7.312E-09	5.339E-09	4.123E-09	3.311E-09	2.734E-09	2.307E-09	1.980E-09
NNW	6.692E-08	3.401E-08	2.185E-08	1.232E-08	8.207E-09	5.976E-09	4.602E-09	3.685E-09	3.034E-09	2.553E-09	2.186E-09
N	9.356E-08	4.717E-08	3.010E-08	1.681E-08	1.110E-08	8.020E-09	6.136E-09	4.882E-09	3.997E-09	3.345E-09	2.848E-09
NNE	1.537E-07	7.761E-08	4.961E-08	2.780E-08	1.843E-08	1.337E-08	1.027E-08	8.200E-09	6.737E-09	5.656E-09	4.831E-09
NE	1.668E-07	8.371E-08	5.325E-08	2.959E-08	1.948E-08	1.404E-08	1.071E-08	8.502E-09	6.944E-09	5.797E-09	4.923E-09
ENE	2.074E-07	1.047E-07	6.687E-08	3.731E-08	2.459E-08	1.772E-08	1.351E-08	1.070E-08	8.720E-09	7.261E-09	6.149E-09
E	2.024E-07	1.028E-07	6.595E-08	3.700E-08	2.446E-08	1.765E-08	1.346E-08	1.067E-08	8.689E-09	7.228E-09	6.113E-09
ESE	2.665E-07	1.366E-07	8.822E-08	5.002E-08	3.333E-08	2.422E-08	1.859E-08	1.480E-08	1.211E-08	1.012E-08	8.587E-09
SE	1.718E-07	8.736E-08	5.609E-08	3.154E-08	2.089E-08	1.511E-08	1.156E-08	9.180E-09	7.496E-09	6.252E-09	5.302E-09
SSE	1.256E-07	6.368E-08	4.082E-08	2.293E-08	1.521E-08	1.102E-08	8.444E-09	6.723E-09	5.505E-09	4.604E-09	3.916E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 10.00 REP. WIND HEIGHT (METERS) 10.0

DIAMETER (METERS) .00
EXIT VELOCITY (METERS) .00

BUILDING HEIGHT (METERS) .0
BLDG.MIN.CRS.SEC.AREA (SQ.METERS) 350.0
HEAT EMISSION RATE (CAL/SEC) .0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.951E-06	1.230E-06	3.579E-07	1.772E-07	1.089E-07	4.754E-08	1.652E-08	7.815E-09	4.765E-09	3.272E-09
SSW	4.238E-06	8.738E-07	2.517E-07	1.237E-07	7.556E-08	3.264E-08	1.114E-08	5.199E-09	3.142E-09	2.144E-09
SW	3.481E-06	7.138E-07	2.036E-07	9.916E-08	6.013E-08	2.563E-08	8.542E-09	3.912E-09	2.341E-09	1.588E-09
WSW	2.565E-06	5.240E-07	1.495E-07	7.285E-08	4.421E-08	1.890E-08	6.340E-09	2.926E-09	1.763E-09	1.204E-09
W	2.790E-06	5.727E-07	1.651E-07	8.115E-08	4.957E-08	2.143E-08	7.347E-09	3.456E-09	2.110E-09	1.457E-09
WNW	3.834E-06	7.869E-07	2.286E-07	1.130E-07	6.942E-08	3.033E-08	1.060E-08	5.069E-09	3.127E-09	2.174E-09
NW	3.988E-06	8.167E-07	2.381E-07	1.181E-07	7.267E-08	3.188E-08	1.121E-08	5.379E-09	3.323E-09	2.313E-09
NNW	4.424E-06	9.113E-07	2.667E-07	1.326E-07	8.178E-08	3.592E-08	1.261E-08	6.021E-09	3.699E-09	2.560E-09
N	6.276E-06	1.295E-06	3.769E-07	1.865E-07	1.146E-07	4.989E-08	1.722E-08	8.087E-09	4.903E-09	3.354E-09
NNE	1.032E-05	2.130E-06	6.193E-07	3.065E-07	1.882E-07	8.208E-08	2.848E-08	1.348E-08	8.234E-09	5.671E-09
NE	1.135E-05	2.342E-06	6.778E-07	3.341E-07	2.046E-07	8.864E-08	3.035E-08	1.416E-08	8.540E-09	5.813E-09
ENE	1.380E-05	2.853E-06	8.324E-07	4.128E-07	2.538E-07	1.107E-07	3.823E-08	1.786E-08	1.075E-08	7.281E-09
E	1.325E-05	2.740E-06	8.041E-07	4.006E-07	2.473E-07	1.086E-07	3.786E-08	1.779E-08	1.071E-08	7.248E-09
ESE	1.699E-05	3.525E-06	1.043E-06	5.234E-07	3.247E-07	1.440E-07	5.109E-08	2.440E-08	1.486E-08	1.014E-08
SE	1.121E-05	2.321E-06	6.816E-07	3.398E-07	2.098E-07	9.222E-08	3.226E-08	1.523E-08	9.218E-09	6.269E-09
SSE	8.305E-06	1.716E-06	5.017E-07	2.493E-07	1.535E-07	6.728E-08	2.347E-08	1.111E-08	6.751E-09	4.616E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.985E-05	1.116E-05	5.313E-06	2.487E-06	9.071E-07	4.636E-07	2.819E-07	1.904E-07	1.379E-07	1.051E-07	8.306E-08
SSW	2.829E-05	7.933E-06	3.790E-06	1.772E-06	6.430E-07	3.270E-07	1.979E-07	1.331E-07	9.610E-08	7.295E-08	5.750E-08
SW	2.355E-05	6.524E-06	3.113E-06	1.452E-06	5.249E-07	2.656E-07	1.600E-07	1.072E-07	7.706E-08	5.829E-08	4.579E-08
WSW	1.760E-05	4.822E-06	2.290E-06	1.066E-06	3.853E-07	1.950E-07	1.175E-07	7.873E-08	5.663E-08	4.285E-08	3.368E-08
W	1.907E-05	5.243E-06	2.489E-06	1.161E-06	4.216E-07	2.144E-07	1.298E-07	8.732E-08	6.303E-08	4.785E-08	3.771E-08
WNW	2.641E-05	7.225E-06	3.412E-06	1.591E-06	5.798E-07	2.959E-07	1.797E-07	1.213E-07	8.778E-08	6.681E-08	5.278E-08
NW	2.783E-05	7.544E-06	3.543E-06	1.651E-06	6.028E-07	3.084E-07	1.876E-07	1.268E-07	9.197E-08	7.010E-08	5.546E-08
NNW	3.028E-05	8.337E-06	3.939E-06	1.840E-06	6.731E-07	3.450E-07	2.103E-07	1.424E-07	1.034E-07	7.889E-08	6.247E-08
N	4.223E-05	1.178E-05	5.608E-06	2.621E-06	9.566E-07	4.891E-07	2.975E-07	2.010E-07	1.456E-07	1.109E-07	8.769E-08
NNE	6.925E-05	1.936E-05	9.220E-06	4.310E-06	1.571E-06	8.027E-07	4.878E-07	3.294E-07	2.386E-07	1.817E-07	1.436E-07
NE	7.602E-05	2.128E-05	1.015E-05	4.745E-06	1.727E-06	8.804E-07	5.341E-07	3.600E-07	2.604E-07	1.980E-07	1.563E-07
ENE	9.251E-05	2.591E-05	1.232E-05	5.770E-06	2.109E-06	1.080E-06	6.577E-07	4.448E-07	3.227E-07	2.460E-07	1.946E-07
E	8.947E-05	2.495E-05	1.180E-05	5.532E-06	2.028E-06	1.042E-06	6.363E-07	4.315E-07	3.137E-07	2.397E-07	1.900E-07
ESE	1.149E-04	3.203E-05	1.511E-05	7.092E-06	2.611E-06	1.346E-06	8.251E-07	5.612E-07	4.092E-07	3.134E-07	2.490E-07
SE	7.561E-05	2.110E-05	9.990E-06	4.682E-06	1.717E-06	8.820E-07	5.387E-07	3.653E-07	2.656E-07	2.029E-07	1.609E-07
SSE	5.596E-05	1.562E-05	7.403E-06	3.467E-06	1.268E-06	6.496E-07	3.959E-07	2.679E-07	1.945E-07	1.483E-07	1.174E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.759E-08	3.260E-08	2.006E-08	1.060E-08	6.713E-09	4.692E-09	3.488E-09	2.707E-09	2.167E-09	1.777E-09	1.485E-09
SSW	4.666E-08	2.226E-08	1.358E-08	7.095E-09	4.459E-09	3.097E-09	2.292E-09	1.771E-09	1.412E-09	1.154E-09	9.618E-10
SW	3.705E-08	1.746E-08	1.056E-08	5.442E-09	3.387E-09	2.334E-09	1.716E-09	1.319E-09	1.047E-09	8.522E-10	7.074E-10
WSW	2.727E-08	1.289E-08	7.811E-09	4.040E-09	2.522E-09	1.743E-09	1.284E-09	9.890E-10	7.866E-10	6.414E-10	5.332E-10
W	3.061E-08	1.461E-08	8.919E-09	4.664E-09	2.934E-09	2.040E-09	1.511E-09	1.169E-09	9.337E-10	7.642E-10	6.375E-10
WNW	4.293E-08	2.069E-08	1.272E-08	6.726E-09	4.267E-09	2.987E-09	2.225E-09	1.730E-09	1.387E-09	1.140E-09	9.539E-10
NW	4.518E-08	2.190E-08	1.352E-08	7.190E-09	4.578E-09	3.214E-09	2.399E-09	1.868E-09	1.500E-09	1.234E-09	1.034E-09
NNW	5.092E-08	2.472E-08	1.528E-08	8.123E-09	5.169E-09	3.624E-09	2.702E-09	2.102E-09	1.686E-09	1.385E-09	1.159E-09
N	7.136E-08	3.440E-08	2.115E-08	1.115E-08	7.052E-09	4.919E-09	3.651E-09	2.828E-09	2.261E-09	1.851E-09	1.544E-09
NNE	1.168E-07	5.627E-08	3.459E-08	1.825E-08	1.155E-08	8.064E-09	5.991E-09	4.646E-09	3.718E-09	3.047E-09	2.545E-09
NE	1.270E-07	6.088E-08	3.728E-08	1.956E-08	1.233E-08	8.578E-09	6.354E-09	4.914E-09	3.922E-09	3.207E-09	2.672E-09
ENE	1.585E-07	7.661E-08	4.719E-08	2.496E-08	1.581E-08	1.104E-08	8.199E-09	6.354E-09	5.080E-09	4.159E-09	3.469E-09
E	1.550E-07	7.549E-08	4.675E-08	2.492E-08	1.587E-08	1.113E-08	8.294E-09	6.445E-09	5.164E-09	4.236E-09	3.539E-09
ESE	2.035E-07	9.985E-08	6.219E-08	3.343E-08	2.142E-08	1.510E-08	1.130E-08	8.812E-09	7.084E-09	5.828E-09	4.883E-09
SE	1.312E-07	6.390E-08	3.958E-08	2.110E-08	1.344E-08	9.425E-09	7.026E-09	5.462E-09	4.378E-09	3.593E-09	3.003E-09
SSE	9.570E-08	4.639E-08	2.865E-08	1.521E-08	9.670E-09	6.774E-09	5.046E-09	3.921E-09	3.142E-09	2.578E-09	2.155E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.357E-06	1.061E-06	2.937E-07	1.404E-07	8.385E-08	3.480E-08	1.097E-08	4.749E-09	2.725E-09	1.784E-09
SSW	3.814E-06	7.533E-07	2.064E-07	9.786E-08	5.806E-08	2.383E-08	7.366E-09	3.138E-09	1.783E-09	1.160E-09
SW	3.133E-06	6.157E-07	1.670E-07	7.851E-08	4.626E-08	1.875E-08	5.666E-09	2.368E-09	1.329E-09	8.563E-10
WSW	2.309E-06	4.520E-07	1.226E-07	5.770E-08	3.402E-08	1.383E-08	4.204E-09	1.767E-09	9.963E-10	6.443E-10
W	2.511E-06	4.938E-07	1.354E-07	6.419E-08	3.809E-08	1.564E-08	4.841E-09	2.067E-09	1.177E-09	7.675E-10
WNW	3.450E-06	6.783E-07	1.873E-07	8.935E-08	5.329E-08	2.209E-08	6.965E-09	3.023E-09	1.741E-09	1.144E-09
NW	3.591E-06	7.048E-07	1.955E-07	9.360E-08	5.599E-08	2.335E-08	7.437E-09	3.252E-09	1.880E-09	1.239E-09
NNW	3.983E-06	7.865E-07	2.191E-07	1.052E-07	6.306E-08	2.634E-08	8.400E-09	3.667E-09	2.115E-09	1.390E-09
N	5.653E-06	1.119E-06	3.100E-07	1.482E-07	8.853E-08	3.672E-08	1.155E-08	4.981E-09	2.847E-09	1.859E-09
NNE	9.290E-06	1.838E-06	5.084E-07	2.428E-07	1.449E-07	6.009E-08	1.890E-08	8.164E-09	4.677E-09	3.060E-09
NE	1.022E-05	2.021E-06	5.568E-07	2.651E-07	1.578E-07	6.508E-08	2.028E-08	8.688E-09	4.948E-09	3.221E-09
ENE	1.243E-05	2.465E-06	6.852E-07	3.284E-07	1.965E-07	8.173E-08	2.583E-08	1.117E-08	6.396E-09	4.176E-09
E	1.194E-05	2.368E-06	6.625E-07	3.192E-07	1.918E-07	8.039E-08	2.575E-08	1.126E-08	6.485E-09	4.253E-09
ESE	1.531E-05	3.045E-06	8.586E-07	4.161E-07	2.512E-07	1.061E-07	3.448E-08	1.526E-08	8.864E-09	5.850E-09
SE	1.010E-05	2.005E-06	5.609E-07	2.702E-07	1.624E-07	6.806E-08	2.180E-08	9.535E-09	5.496E-09	3.607E-09
SSE	7.479E-06	1.482E-06	4.124E-07	1.979E-07	1.185E-07	4.946E-08	1.573E-08	6.855E-09	3.946E-09	2.589E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	DISTANCES IN MILES										
S	1.082E-07	3.660E-08	1.879E-08	8.934E-09	3.209E-09	1.591E-09	9.371E-10	6.136E-10	4.318E-10	3.200E-10	2.466E-10
SSW	9.010E-08	3.047E-08	1.564E-08	7.437E-09	2.672E-09	1.325E-09	7.801E-10	5.108E-10	3.594E-10	2.664E-10	2.053E-10
SW	1.068E-07	3.610E-08	1.854E-08	8.812E-09	3.165E-09	1.570E-09	9.243E-10	6.052E-10	4.259E-10	3.156E-10	2.432E-10
WSW	9.838E-08	3.327E-08	1.708E-08	8.121E-09	2.917E-09	1.447E-09	8.518E-10	5.578E-10	3.925E-10	2.909E-10	2.241E-10
W	1.086E-07	3.673E-08	1.886E-08	8.965E-09	3.220E-09	1.597E-09	9.403E-10	6.157E-10	4.332E-10	3.211E-10	2.474E-10
WNW	1.294E-07	4.375E-08	2.246E-08	1.068E-08	3.836E-09	1.902E-09	1.120E-09	7.334E-10	5.161E-10	3.825E-10	2.947E-10
NW	1.236E-07	4.181E-08	2.147E-08	1.021E-08	3.666E-09	1.818E-09	1.070E-09	7.009E-10	4.932E-10	3.655E-10	2.817E-10
NNW	1.106E-07	3.740E-08	1.920E-08	9.129E-09	3.279E-09	1.626E-09	9.575E-10	6.270E-10	4.412E-10	3.269E-10	2.520E-10
N	1.278E-07	4.323E-08	2.220E-08	1.055E-08	3.791E-09	1.880E-09	1.107E-09	7.248E-10	5.100E-10	3.780E-10	2.913E-10
NNE	2.436E-07	8.237E-08	4.229E-08	2.011E-08	7.222E-09	3.582E-09	2.109E-09	1.381E-09	9.716E-10	7.201E-10	5.549E-10
NE	2.457E-07	8.310E-08	4.267E-08	2.029E-08	7.286E-09	3.614E-09	2.128E-09	1.393E-09	9.803E-10	7.265E-10	5.599E-10
ENE	1.980E-07	6.694E-08	3.437E-08	1.634E-08	5.870E-09	2.911E-09	1.714E-09	1.122E-09	7.897E-10	5.853E-10	4.510E-10
E	1.602E-07	5.417E-08	2.781E-08	1.322E-08	4.749E-09	2.355E-09	1.387E-09	9.081E-10	6.390E-10	4.735E-10	3.649E-10
ESE	1.817E-07	6.145E-08	3.155E-08	1.500E-08	5.388E-09	2.672E-09	1.573E-09	1.030E-09	7.250E-10	5.373E-10	4.140E-10
SE	1.488E-07	5.033E-08	2.584E-08	1.229E-08	4.413E-09	2.189E-09	1.289E-09	8.438E-10	5.938E-10	4.400E-10	3.391E-10
SSE	1.345E-07	4.547E-08	2.335E-08	1.110E-08	3.987E-09	1.977E-09	1.164E-09	7.623E-10	5.364E-10	3.975E-10	3.063E-10

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
	DISTANCES IN MILES										
S	1.959E-10	8.702E-11	5.271E-11	2.664E-11	1.613E-11	1.081E-11	7.748E-12	5.818E-12	4.523E-12	3.613E-12	2.949E-12
SSW	1.631E-10	7.244E-11	4.388E-11	2.218E-11	1.343E-11	9.001E-12	6.450E-12	4.843E-12	3.766E-12	3.008E-12	2.455E-12
SW	1.932E-10	8.583E-11	5.199E-11	2.628E-11	1.591E-11	1.066E-11	7.642E-12	5.738E-12	4.462E-12	3.564E-12	2.909E-12
WSW	1.781E-10	7.910E-11	4.792E-11	2.422E-11	1.466E-11	9.828E-12	7.042E-12	5.288E-12	4.112E-12	3.284E-12	2.681E-12
W	1.966E-10	8.732E-11	5.289E-11	2.674E-11	1.618E-11	1.085E-11	7.774E-12	5.838E-12	4.539E-12	3.626E-12	2.959E-12
WNW	2.342E-10	1.040E-10	6.301E-11	3.185E-11	1.928E-11	1.292E-11	9.261E-12	6.954E-12	5.407E-12	4.319E-12	3.525E-12
NW	2.238E-10	9.941E-11	6.022E-11	3.044E-11	1.842E-11	1.235E-11	8.850E-12	6.646E-12	5.167E-12	4.128E-12	3.369E-12
NNW	2.002E-10	8.892E-11	5.386E-11	2.723E-11	1.648E-11	1.105E-11	7.917E-12	5.944E-12	4.622E-12	3.692E-12	3.014E-12
N	2.314E-10	1.028E-10	6.227E-11	3.147E-11	1.905E-11	1.277E-11	9.152E-12	6.872E-12	5.343E-12	4.268E-12	3.484E-12
NNE	4.408E-10	1.958E-10	1.186E-10	5.996E-11	3.629E-11	2.433E-11	1.744E-11	1.309E-11	1.018E-11	8.132E-12	6.637E-12
NE	4.448E-10	1.976E-10	1.197E-10	6.050E-11	3.662E-11	2.455E-11	1.759E-11	1.321E-11	1.027E-11	8.204E-12	6.696E-12
ENE	3.583E-10	1.592E-10	9.642E-11	4.873E-11	2.950E-11	1.978E-11	1.417E-11	1.064E-11	8.274E-12	6.609E-12	5.394E-12
E	2.899E-10	1.288E-10	7.801E-11	3.943E-11	2.387E-11	1.600E-11	1.147E-11	8.610E-12	6.694E-12	5.347E-12	4.365E-12
ESE	3.289E-10	1.461E-10	8.851E-11	4.474E-11	2.708E-11	1.815E-11	1.301E-11	9.768E-12	7.595E-12	6.067E-12	4.952E-12
SE	2.694E-10	1.197E-10	7.249E-11	3.664E-11	2.218E-11	1.487E-11	1.065E-11	8.001E-12	6.221E-12	4.969E-12	4.056E-12
SSE	2.434E-10	1.081E-10	6.549E-11	3.310E-11	2.003E-11	1.343E-11	9.625E-12	7.227E-12	5.619E-12	4.489E-12	3.664E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Ground Level/Radwaste Bldg

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
	SEGMENT BOUNDARIES IN MILES									
S	1.837E-08	3.762E-09	9.822E-10	4.411E-10	2.496E-10	9.597E-11	2.776E-11	1.100E-11	5.876E-12	3.637E-12
SSW	1.529E-08	3.132E-09	8.177E-10	3.672E-10	2.077E-10	7.989E-11	2.311E-11	9.160E-12	4.892E-12	3.028E-12
SW	1.812E-08	3.711E-09	9.688E-10	4.351E-10	2.461E-10	9.466E-11	2.738E-11	1.085E-11	5.796E-12	3.587E-12
WSW	1.670E-08	3.420E-09	8.928E-10	4.010E-10	2.268E-10	8.723E-11	2.524E-11	1.000E-11	5.341E-12	3.306E-12
W	1.843E-08	3.775E-09	9.856E-10	4.426E-10	2.504E-10	9.630E-11	2.786E-11	1.104E-11	5.896E-12	3.649E-12
WNW	2.196E-08	4.497E-09	1.174E-09	5.273E-10	2.983E-10	1.147E-10	3.319E-11	1.315E-11	7.024E-12	4.347E-12
NW	2.098E-08	4.298E-09	1.122E-09	5.039E-10	2.851E-10	1.096E-10	3.171E-11	1.257E-11	6.712E-12	4.155E-12
NNW	1.877E-08	3.844E-09	1.004E-09	4.507E-10	2.550E-10	9.806E-11	2.837E-11	1.124E-11	6.004E-12	3.716E-12
N	2.170E-08	4.444E-09	1.160E-09	5.211E-10	2.948E-10	1.134E-10	3.279E-11	1.300E-11	6.941E-12	4.296E-12
NNE	4.134E-08	8.467E-09	2.210E-09	9.927E-10	5.616E-10	2.160E-10	6.248E-11	2.476E-11	1.322E-11	8.185E-12

NE	4.171E-08	8.543E-09	2.230E-09	1.002E-09	5.666E-10	2.179E-10	6.304E-11	2.498E-11	1.334E-11	8.258E-12
ENE	3.360E-08	6.882E-09	1.797E-09	8.069E-10	4.564E-10	1.755E-10	5.078E-11	2.013E-11	1.075E-11	6.652E-12
E	2.718E-08	5.568E-09	1.454E-09	6.528E-10	3.693E-10	1.420E-10	4.109E-11	1.628E-11	8.696E-12	5.382E-12
ESE	3.084E-08	6.317E-09	1.649E-09	7.407E-10	4.190E-10	1.611E-10	4.662E-11	1.848E-11	9.866E-12	6.107E-12
SE	2.526E-08	5.174E-09	1.351E-09	6.067E-10	3.432E-10	1.320E-10	3.818E-11	1.513E-11	8.081E-12	5.002E-12
SSE	2.282E-08	4.674E-09	1.220E-09	5.480E-10	3.100E-10	1.192E-10	3.449E-11	1.367E-11	7.300E-12	4.518E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.
1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

0Fermi COL A (using distances from TB Vent Stack)

0Ground Level/Radwaste Bldg
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3)	X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
		NO DECAY					
+				2.260 DAY DECAY			
+					8.000 DAY DECAY		
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Site Boundary	S	.76	5.8E-06	5.8E-06	5.2E-06	1.8E-08
	Site Boundary	SSW	.78	3.9E-06	3.9E-06	3.5E-06	1.4E-08
	Site Boundary	SW	.97	1.8E-06	1.8E-06	1.6E-06	9.5E-09
	Site Boundary	WSW	.75	2.6E-06	2.6E-06	2.3E-06	1.7E-08
	Site Boundary	W	.62	3.9E-06	3.9E-06	3.5E-06	2.6E-08
	Site Boundary	WNW	.56	6.5E-06	6.5E-06	5.9E-06	3.7E-08
	Site Boundary	NW	.55	7.0E-06	7.0E-06	6.4E-06	3.6E-08
	Site Boundary	NNW	.55	7.8E-06	7.8E-06	7.1E-06	3.2E-08
	Site Boundary	N	.63	8.5E-06	8.5E-06	7.7E-06	3.0E-08
	Site Boundary	NNE	.91	6.2E-06	6.2E-06	5.5E-06	2.5E-08
	Site Boundary	NE	1.20	3.5E-06	3.5E-06	3.0E-06	1.3E-08
	Site Boundary	SSE	.76	8.1E-06	8.1E-06	7.2E-06	2.3E-08
	Residence	SSE	.97	4.2E-06	4.2E-06	3.7E-06	1.2E-08
	Residence	SSW	.95	2.3E-06	2.3E-06	2.0E-06	8.4E-09
	Residence	SW	1.07	1.4E-06	1.4E-06	1.2E-06	7.4E-09
	Residence	WSW	1.08	1.0E-06	1.0E-06	8.7E-07	6.7E-09
	Residence	W	1.01	1.3E-06	1.3E-06	1.1E-06	8.7E-09
	Residence	NW	.66	5.0E-06	4.9E-06	4.4E-06	2.6E-08
	Residence	NW	1.04	1.7E-06	1.7E-06	1.5E-06	9.2E-09
	Residence	NNW	1.17	1.4E-06	1.4E-06	1.2E-06	6.1E-09
	Residence	NNE	1.29	2.7E-06	2.6E-06	2.3E-06	1.1E-08
	Residence	NNE	1.22	3.0E-06	3.0E-06	2.6E-06	1.2E-08
	Residence	NE	1.28	3.0E-06	3.0E-06	2.6E-06	1.1E-08
	Garden	S	1.34	1.4E-06	1.4E-06	1.2E-06	4.2E-09
	Garden	WSW	2.09	2.1E-07	2.1E-07	1.8E-07	1.3E-09
	Garden	W	1.54	4.7E-07	4.6E-07	3.9E-07	3.0E-09
	Garden	NW	.66	4.9E-06	4.9E-06	4.4E-06	2.6E-08
	Garden	NNW	1.07	1.8E-06	1.8E-06	1.6E-06	7.7E-09
	Garden	NNW	1.44	8.8E-07	8.7E-07	7.4E-07	3.6E-09
	Garden	N	2.34	4.2E-07	4.2E-07	3.4E-07	1.3E-09
	Garden	NNE	2.12	8.5E-07	8.5E-07	7.0E-07	3.1E-09
	Garden	NE	2.16	9.1E-07	8.9E-07	7.4E-07	3.0E-09
	Sheep	NNW	4.43	8.6E-08	8.3E-08	6.4E-08	2.6E-10
	Sheep	NNE	4.46	1.9E-07	1.9E-07	1.5E-07	5.7E-10
	Goat	WNW	2.29	2.7E-07	2.7E-07	2.2E-07	1.4E-09

Goat	NNW	3.06	1.7E-07	1.7E-07	1.4E-07	6.0E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	10.00	REP. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	.00	BUILDING HEIGHT	(METERS)	.0
EXIT VELOCITY	(METERS)	.00	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	350.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

ALL GROUND LEVEL RELEASES.

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.382E-07	2.844E-07	1.768E-07	9.884E-08	6.658E-08	4.903E-08	3.816E-08	3.086E-08	2.568E-08	2.185E-08
SSW	8.151E-07	3.275E-07	2.251E-07	1.505E-07	9.004E-08	6.174E-08	4.547E-08	3.517E-08	2.821E-08	2.328E-08	1.964E-08
SW	1.150E-06	4.523E-07	3.164E-07	2.102E-07	1.178E-07	7.642E-08	5.404E-08	4.055E-08	3.177E-08	2.573E-08	2.137E-08
WSW	1.211E-06	4.644E-07	3.042E-07	1.915E-07	1.008E-07	6.333E-08	4.395E-08	3.258E-08	2.531E-08	2.037E-08	1.704E-08
W	1.611E-06	5.708E-07	3.582E-07	2.179E-07	1.104E-07	6.829E-08	4.710E-08	3.483E-08	2.704E-08	2.177E-08	1.802E-08
WNW	1.858E-06	6.257E-07	3.782E-07	2.329E-07	1.219E-07	7.696E-08	5.378E-08	4.016E-08	3.143E-08	2.547E-08	2.120E-08
NW	1.820E-06	6.145E-07	3.538E-07	2.100E-07	1.090E-07	6.904E-08	4.851E-08	3.643E-08	2.866E-08	2.334E-08	1.962E-08
NNW	1.706E-06	5.681E-07	3.227E-07	1.889E-07	9.915E-08	6.416E-08	4.598E-08	3.511E-08	2.801E-08	2.307E-08	1.973E-08
N	1.751E-06	6.179E-07	3.761E-07	2.313E-07	1.278E-07	8.509E-08	6.201E-08	4.785E-08	3.843E-08	3.180E-08	2.711E-08
NNE	3.590E-06	1.280E-06	7.693E-07	4.495E-07	2.328E-07	1.499E-07	1.071E-07	8.168E-08	6.684E-08	5.634E-08	4.769E-08
NE	2.374E-06	9.402E-07	6.270E-07	3.986E-07	2.256E-07	1.507E-07	1.096E-07	8.423E-08	6.739E-08	5.555E-08	4.688E-08
ENE	1.358E-06	5.324E-07	3.603E-07	2.487E-07	1.630E-07	1.185E-07	9.085E-08	7.241E-08	5.948E-08	5.004E-08	4.292E-08
E	1.061E-06	4.341E-07	2.860E-07	1.909E-07	1.219E-07	8.829E-08	6.794E-08	5.446E-08	4.501E-08	3.809E-08	3.285E-08
ESE	1.198E-06	4.623E-07	2.929E-07	1.918E-07	1.215E-07	8.832E-08	6.843E-08	5.527E-08	4.601E-08	3.921E-08	3.403E-08
SE	1.041E-06	3.935E-07	2.490E-07	1.666E-07	1.086E-07	7.944E-08	6.137E-08	4.927E-08	4.074E-08	3.447E-08	2.972E-08
SSE	1.131E-06	4.349E-07	2.828E-07	1.840E-07	1.110E-07	7.726E-08	5.778E-08	4.534E-08	3.685E-08	3.077E-08	2.625E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.893E-08	1.162E-08	8.383E-09	5.506E-09	4.086E-09	3.244E-09	2.690E-09	2.297E-09	2.003E-09	1.774E-09	1.589E-09
SSW	1.688E-08	9.925E-09	6.920E-09	4.318E-09	3.080E-09	2.368E-09	1.911E-09	1.594E-09	1.363E-09	1.188E-09	1.050E-09
SW	1.813E-08	1.012E-08	6.827E-09	4.078E-09	2.823E-09	2.121E-09	1.679E-09	1.378E-09	1.162E-09	9.993E-10	8.736E-10
WSW	1.456E-08	8.083E-09	5.453E-09	3.268E-09	2.271E-09	1.711E-09	1.357E-09	1.114E-09	9.383E-10	8.054E-10	7.015E-10
W	1.525E-08	8.841E-09	6.167E-09	3.874E-09	2.754E-09	2.073E-09	1.625E-09	1.322E-09	1.106E-09	9.460E-10	8.228E-10
WNW	1.803E-08	1.092E-08	7.906E-09	5.267E-09	3.845E-09	2.897E-09	2.281E-09	1.865E-09	1.567E-09	1.345E-09	1.174E-09
NW	1.685E-08	1.020E-08	7.395E-09	4.977E-09	3.757E-09	2.976E-09	2.408E-09	1.984E-09	1.676E-09	1.444E-09	1.264E-09
NNW	1.720E-08	1.103E-08	8.292E-09	5.771E-09	4.349E-09	3.360E-09	2.666E-09	2.186E-09	1.842E-09	1.585E-09	1.385E-09
N	2.354E-08	1.489E-08	1.100E-08	7.457E-09	5.597E-09	4.399E-09	3.534E-09	2.895E-09	2.433E-09	2.087E-09	1.820E-09
NNE	4.117E-08	2.404E-08	1.678E-08	1.053E-08	7.545E-09	5.821E-09	4.707E-09	3.934E-09	3.368E-09	2.938E-09	2.600E-09
NE	4.033E-08	2.375E-08	1.663E-08	1.047E-08	7.522E-09	5.817E-09	4.716E-09	3.951E-09	3.392E-09	2.966E-09	2.632E-09
ENE	3.742E-08	2.309E-08	1.664E-08	1.086E-08	8.000E-09	6.308E-09	5.200E-09	4.420E-09	3.844E-09	3.402E-09	3.052E-09
E	2.879E-08	1.789E-08	1.293E-08	8.455E-09	6.210E-09	4.869E-09	3.984E-09	3.359E-09	2.896E-09	2.539E-09	2.257E-09
ESE	3.001E-08	1.924E-08	1.426E-08	9.683E-09	7.321E-09	5.880E-09	4.912E-09	4.219E-09	3.698E-09	3.293E-09	2.970E-09
SE	2.604E-08	1.630E-08	1.186E-08	7.845E-09	5.827E-09	4.622E-09	3.827E-09	3.264E-09	2.847E-09	2.525E-09	2.270E-09
SSE	2.279E-08	1.437E-08	1.062E-08	7.307E-09	5.661E-09	4.666E-09	3.987E-09	3.480E-09	3.074E-09	2.733E-09	2.438E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6

DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.707E-07	1.018E-07	4.936E-08	3.097E-08	2.190E-08	1.181E-08	5.514E-09	3.247E-09	2.298E-09	1.773E-09
SSW	2.147E-07	9.090E-08	4.569E-08	2.832E-08	1.970E-08	1.014E-08	4.346E-09	2.375E-09	1.597E-09	1.189E-09
SW	2.994E-07	1.200E-07	5.461E-08	3.198E-08	2.146E-08	1.044E-08	4.131E-09	2.131E-09	1.381E-09	1.001E-09
WSW	2.897E-07	1.043E-07	4.457E-08	2.550E-08	1.711E-08	8.353E-09	3.311E-09	1.719E-09	1.117E-09	8.063E-10
W	3.431E-07	1.156E-07	4.784E-08	2.726E-08	1.810E-08	9.076E-09	3.886E-09	2.075E-09	1.326E-09	9.479E-10
WNW	3.686E-07	1.266E-07	5.451E-08	3.165E-08	2.129E-08	1.116E-08	5.221E-09	2.904E-09	1.871E-09	1.348E-09
NW	3.478E-07	1.137E-07	4.915E-08	2.886E-08	1.969E-08	1.043E-08	4.972E-09	2.957E-09	1.988E-09	1.446E-09
NNW	3.178E-07	1.035E-07	4.648E-08	2.816E-08	1.978E-08	1.119E-08	5.699E-09	3.346E-09	2.192E-09	1.587E-09
N	3.655E-07	1.318E-07	6.250E-08	3.859E-08	2.718E-08	1.508E-08	7.417E-09	4.373E-09	2.902E-09	2.091E-09
NNE	7.406E-07	2.441E-07	1.083E-07	6.708E-08	4.784E-08	2.462E-08	1.059E-08	5.835E-09	3.939E-09	2.940E-09
NE	5.951E-07	2.307E-07	1.104E-07	6.769E-08	4.702E-08	2.427E-08	1.053E-08	5.831E-09	3.957E-09	2.969E-09
ENE	3.489E-07	1.623E-07	9.085E-08	5.958E-08	4.299E-08	2.340E-08	1.087E-08	6.316E-09	4.423E-09	3.403E-09
E	2.766E-07	1.223E-07	6.797E-08	4.507E-08	3.290E-08	1.811E-08	8.453E-09	4.873E-09	3.361E-09	2.540E-09
ESE	2.856E-07	1.224E-07	6.847E-08	4.606E-08	3.408E-08	1.942E-08	9.650E-09	5.877E-09	4.219E-09	3.293E-09
SE	2.445E-07	1.085E-07	6.135E-08	4.079E-08	2.976E-08	1.649E-08	7.840E-09	4.626E-09	3.266E-09	2.526E-09
SSE	2.727E-07	1.122E-07	5.800E-08	3.696E-08	2.631E-08	1.457E-08	7.311E-09	4.660E-09	3.470E-09	2.725E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.036E+01	8.038E+01	8.038E+01	8.038E+01	8.038E+01	7.732E+01	6.927E+01	5.972E+01	4.991E+01	4.002E+01
SSW	8.001E+01	7.962E+01	7.962E+01	7.962E+01	7.962E+01	7.724E+01	7.098E+01	6.355E+01	5.592E+01	4.822E+01
SW	7.822E+01	7.753E+01	7.753E+01	7.753E+01	7.753E+01	7.529E+01	6.938E+01	6.237E+01	5.518E+01	4.792E+01
WSW	7.486E+01	7.396E+01	7.396E+01	7.396E+01	7.236E+01	6.690E+01	5.618E+01	4.345E+01	3.039E+01	1.736E+01
W	6.955E+01	6.828E+01	6.828E+01	6.828E+01	6.828E+01	5.855E+01	3.289E+01	8.608E+00	1.732E+00	1.215E+00
WNW	7.213E+01	7.063E+01	7.063E+01	7.063E+01	7.063E+01	5.936E+01	2.968E+01	5.985E+00	1.163E+00	7.944E-01
NW	7.673E+01	7.559E+01	7.559E+01	7.559E+01	7.505E+01	6.692E+01	4.669E+01	2.292E+01	7.056E+00	3.422E+00
NNW	7.613E+01	7.527E+01	7.527E+01	7.527E+01	7.420E+01	6.296E+01	3.577E+01	9.883E+00	2.262E+00	1.598E+00
N	7.721E+01	7.658E+01	7.658E+01	7.658E+01	7.604E+01	6.716E+01	4.497E+01	1.940E+01	4.926E+00	2.492E+00
NNE	7.694E+01	7.706E+01	7.706E+01	7.488E+01	7.253E+01	7.091E+01	6.787E+01	6.427E+01	6.056E+01	5.683E+01
NE	7.865E+01	7.873E+01	7.873E+01	7.873E+01	7.873E+01	7.724E+01	7.331E+01	6.864E+01	6.384E+01	5.901E+01
ENE	8.373E+01	8.378E+01	8.378E+01	8.378E+01	8.378E+01	8.229E+01	7.835E+01	7.368E+01	6.889E+01	6.405E+01
E	8.632E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01	8.639E+01
ESE	8.399E+01	8.402E+01	8.402E+01	8.402E+01	8.402E+01	8.355E+01	8.229E+01	8.081E+01	7.928E+01	7.774E+01
SE	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.419E+01	8.324E+01	8.074E+01	7.776E+01	7.471E+01	7.163E+01
SSE	8.240E+01	8.240E+01	8.240E+01	8.240E+01	8.240E+01	7.778E+01	6.561E+01	5.117E+01	3.634E+01	2.144E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.125E-06	4.379E-07	2.840E-07	1.765E-07	9.860E-08	6.635E-08	4.881E-08	3.795E-08	3.065E-08	2.548E-08	2.165E-08
SSW	8.148E-07	3.272E-07	2.248E-07	1.503E-07	8.982E-08	6.153E-08	4.527E-08	3.498E-08	2.803E-08	2.311E-08	1.948E-08
SW	1.150E-06	4.518E-07	3.159E-07	2.099E-07	1.175E-07	7.616E-08	5.381E-08	4.034E-08	3.157E-08	2.554E-08	2.119E-08
WSW	1.210E-06	4.640E-07	3.038E-07	1.912E-07	1.006E-07	6.314E-08	4.377E-08	3.241E-08	2.516E-08	2.022E-08	1.690E-08
W	1.610E-06	5.704E-07	3.578E-07	2.176E-07	1.101E-07	6.809E-08	4.691E-08	3.466E-08	2.688E-08	2.162E-08	1.787E-08
WNW	1.857E-06	6.252E-07	3.778E-07	2.325E-07	1.216E-07	7.672E-08	5.357E-08	3.997E-08	3.126E-08	2.531E-08	2.104E-08
NW	1.819E-06	6.139E-07	3.533E-07	2.096E-07	1.087E-07	6.878E-08	4.828E-08	3.622E-08	2.847E-08	2.316E-08	1.944E-08
NNW	1.705E-06	5.676E-07	3.222E-07	1.885E-07	9.889E-08	6.393E-08	4.577E-08	3.492E-08	2.783E-08	2.290E-08	1.956E-08
N	1.750E-06	6.173E-07	3.755E-07	2.308E-07	1.275E-07	8.476E-08	6.170E-08	4.755E-08	3.814E-08	3.152E-08	2.684E-08
NNE	3.589E-06	1.279E-06	7.684E-07	4.488E-07	2.323E-07	1.494E-07	1.067E-07	8.125E-08	6.642E-08	5.593E-08	4.729E-08
NE	2.373E-06	9.395E-07	6.263E-07	3.980E-07	2.250E-07	1.502E-07	1.091E-07	8.379E-08	6.697E-08	5.515E-08	4.649E-08
ENE	1.357E-06	5.319E-07	3.599E-07	2.482E-07	1.625E-07	1.180E-07	9.038E-08	7.195E-08	5.903E-08	4.959E-08	4.248E-08
E	1.061E-06	4.337E-07	2.855E-07	1.906E-07	1.215E-07	8.791E-08	6.756E-08	5.408E-08	4.463E-08	3.771E-08	3.248E-08
ESE	1.197E-06	4.619E-07	2.925E-07	1.915E-07	1.211E-07	8.797E-08	6.807E-08	5.490E-08	4.565E-08	3.884E-08	3.367E-08
SE	1.040E-06	3.931E-07	2.487E-07	1.663E-07	1.083E-07	7.912E-08	6.105E-08	4.895E-08	4.042E-08	3.416E-08	2.941E-08
SSE	1.130E-06	4.345E-07	2.825E-07	1.837E-07	1.107E-07	7.698E-08	5.751E-08	4.507E-08	3.659E-08	3.052E-08	2.600E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.874E-08	1.144E-08	8.203E-09	5.324E-09	3.904E-09	3.064E-09	2.511E-09	2.119E-09	1.827E-09	1.599E-09	1.416E-09
SSW	1.672E-08	9.781E-09	6.784E-09	4.188E-09	2.955E-09	2.247E-09	1.793E-09	1.480E-09	1.252E-09	1.078E-09	9.428E-10
SW	1.796E-08	9.967E-09	6.686E-09	3.947E-09	2.700E-09	2.004E-09	1.567E-09	1.271E-09	1.059E-09	9.000E-10	7.775E-10
WSW	1.442E-08	7.964E-09	5.342E-09	3.164E-09	2.173E-09	1.617E-09	1.267E-09	1.028E-09	8.554E-10	7.257E-10	6.249E-10
W	1.511E-08	8.716E-09	6.047E-09	3.759E-09	2.644E-09	1.969E-09	1.527E-09	1.230E-09	1.019E-09	8.631E-10	7.435E-10
WNW	1.789E-08	1.078E-08	7.767E-09	5.121E-09	3.699E-09	2.758E-09	2.150E-09	1.740E-09	1.448E-09	1.231E-09	1.064E-09
NW	1.668E-08	1.004E-08	7.238E-09	4.814E-09	3.589E-09	2.809E-09	2.244E-09	1.827E-09	1.524E-09	1.298E-09	1.124E-09
NNW	1.703E-08	1.087E-08	8.116E-09	5.577E-09	4.146E-09	3.157E-09	2.471E-09	2.002E-09	1.666E-09	1.416E-09	1.224E-09
N	2.328E-08	1.462E-08	1.072E-08	7.169E-09	5.304E-09	4.110E-09	3.255E-09	2.630E-09	2.180E-09	1.846E-09	1.589E-09
NNE	4.078E-08	2.368E-08	1.644E-08	1.020E-08	7.226E-09	5.510E-09	4.406E-09	3.641E-09	3.083E-09	2.659E-09	2.328E-09
NE	3.995E-08	2.340E-08	1.629E-08	1.013E-08	7.193E-09	5.494E-09	4.399E-09	3.640E-09	3.086E-09	2.665E-09	2.335E-09
ENE	3.699E-08	2.267E-08	1.622E-08	1.044E-08	7.581E-09	5.892E-09	4.786E-09	4.009E-09	3.436E-09	2.997E-09	2.650E-09
E	2.843E-08	1.753E-08	1.258E-08	8.097E-09	5.855E-09	4.520E-09	3.641E-09	3.022E-09	2.565E-09	2.215E-09	1.939E-09
ESE	2.965E-08	1.887E-08	1.389E-08	9.299E-09	6.930E-09	5.486E-09	4.517E-09	3.824E-09	3.304E-09	2.901E-09	2.578E-09
SE	2.573E-08	1.600E-08	1.156E-08	7.541E-09	5.523E-09	4.320E-09	3.526E-09	2.965E-09	2.549E-09	2.229E-09	1.976E-09
SSE	2.255E-08	1.413E-08	1.037E-08	7.039E-09	5.378E-09	4.372E-09	3.684E-09	3.171E-09	2.763E-09	2.424E-09	2.133E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.704E-07	1.016E-07	4.914E-08	3.077E-08	2.171E-08	1.162E-08	5.333E-09	3.067E-09	2.120E-09	1.599E-09
SSW	2.144E-07	9.068E-08	4.549E-08	2.814E-08	1.953E-08	9.992E-09	4.217E-09	2.255E-09	1.483E-09	1.080E-09
SW	2.990E-07	1.197E-07	5.438E-08	3.178E-08	2.128E-08	1.028E-08	4.001E-09	2.015E-09	1.275E-09	9.016E-10
WSW	2.894E-07	1.041E-07	4.439E-08	2.535E-08	1.697E-08	8.234E-09	3.207E-09	1.625E-09	1.030E-09	7.268E-10
W	3.428E-07	1.153E-07	4.766E-08	2.710E-08	1.796E-08	8.952E-09	3.772E-09	1.972E-09	1.235E-09	8.651E-10
WNW	3.682E-07	1.263E-07	5.431E-08	3.148E-08	2.114E-08	1.102E-08	5.077E-09	2.766E-09	1.746E-09	1.234E-09
NW	3.473E-07	1.134E-07	4.893E-08	2.866E-08	1.952E-08	1.027E-08	4.808E-09	2.791E-09	1.831E-09	1.301E-09
NNW	3.173E-07	1.033E-07	4.627E-08	2.798E-08	1.961E-08	1.101E-08	5.505E-09	3.146E-09	2.008E-09	1.419E-09
N	3.650E-07	1.315E-07	6.219E-08	3.831E-08	2.691E-08	1.481E-08	7.130E-09	4.086E-09	2.637E-09	1.850E-09
NNE	7.397E-07	2.435E-07	1.079E-07	6.666E-08	4.744E-08	2.426E-08	1.026E-08	5.526E-09	3.647E-09	2.662E-09
NE	5.944E-07	2.302E-07	1.099E-07	6.727E-08	4.663E-08	2.392E-08	1.020E-08	5.509E-09	3.646E-09	2.668E-09
ENE	3.485E-07	1.618E-07	9.038E-08	5.913E-08	4.256E-08	2.298E-08	1.045E-08	5.900E-09	4.013E-09	2.998E-09
E	2.763E-07	1.219E-07	6.759E-08	4.469E-08	3.253E-08	1.775E-08	8.096E-09	4.524E-09	3.025E-09	2.216E-09
ESE	2.852E-07	1.220E-07	6.811E-08	4.570E-08	3.372E-08	1.905E-08	9.266E-09	5.483E-09	3.824E-09	2.901E-09
SE	2.442E-07	1.082E-07	6.103E-08	4.047E-08	2.946E-08	1.619E-08	7.538E-09	4.323E-09	2.967E-09	2.230E-09
SSE	2.724E-07	1.119E-07	5.773E-08	3.670E-08	2.606E-08	1.433E-08	7.041E-09	4.365E-09	3.163E-09	2.417E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.074E-06	4.091E-07	2.636E-07	1.641E-07	9.204E-08	6.201E-08	4.561E-08	3.542E-08	2.858E-08	2.373E-08	2.014E-08
SSW	7.794E-07	3.066E-07	2.101E-07	1.413E-07	8.495E-08	5.823E-08	4.278E-08	3.298E-08	2.637E-08	2.169E-08	1.824E-08
SW	1.102E-06	4.235E-07	2.957E-07	1.975E-07	1.106E-07	7.142E-08	5.022E-08	3.747E-08	2.919E-08	2.351E-08	1.943E-08
WSW	1.161E-06	4.354E-07	2.837E-07	1.789E-07	9.393E-08	5.867E-08	4.046E-08	2.980E-08	2.301E-08	1.841E-08	1.534E-08
W	1.542E-06	5.323E-07	3.314E-07	2.015E-07	1.016E-07	6.250E-08	4.283E-08	3.148E-08	2.431E-08	1.946E-08	1.602E-08
WNW	1.788E-06	5.871E-07	3.514E-07	2.164E-07	1.130E-07	7.097E-08	4.933E-08	3.665E-08	2.854E-08	2.301E-08	1.907E-08
NW	1.756E-06	5.797E-07	3.296E-07	1.950E-07	1.009E-07	6.357E-08	4.444E-08	3.321E-08	2.601E-08	2.108E-08	1.765E-08
NNW	1.640E-06	5.327E-07	2.981E-07	1.742E-07	9.145E-08	5.909E-08	4.226E-08	3.219E-08	2.561E-08	2.104E-08	1.797E-08
N	1.678E-06	5.768E-07	3.469E-07	2.137E-07	1.186E-07	7.905E-08	5.757E-08	4.436E-08	3.557E-08	2.937E-08	2.501E-08
NNE	3.426E-06	1.188E-06	7.048E-07	4.110E-07	2.130E-07	1.370E-07	9.783E-08	7.443E-08	6.091E-08	5.134E-08	4.338E-08
NE	2.268E-06	8.786E-07	5.833E-07	3.719E-07	2.111E-07	1.408E-07	1.021E-07	7.830E-08	6.246E-08	5.134E-08	4.320E-08
ENE	1.308E-06	5.028E-07	3.390E-07	2.354E-07	1.554E-07	1.130E-07	8.652E-08	6.882E-08	5.639E-08	4.733E-08	4.050E-08
E	1.026E-06	4.133E-07	2.704E-07	1.811E-07	1.162E-07	8.420E-08	6.471E-08	5.177E-08	4.269E-08	3.604E-08	3.101E-08
ESE	1.160E-06	4.399E-07	2.764E-07	1.815E-07	1.156E-07	8.416E-08	6.518E-08	5.258E-08	4.371E-08	3.719E-08	3.223E-08
SE	1.009E-06	3.745E-07	2.351E-07	1.580E-07	1.036E-07	7.589E-08	5.857E-08	4.694E-08	3.874E-08	3.271E-08	2.814E-08
SSE	1.087E-06	4.098E-07	2.648E-07	1.729E-07	1.048E-07	7.293E-08	5.444E-08	4.261E-08	3.454E-08	2.876E-08	2.446E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.741E-08	1.060E-08	7.594E-09	4.936E-09	3.634E-09	2.868E-09	2.364E-09	1.995E-09	1.699E-09	1.464E-09	1.275E-09
SSW	1.563E-08	9.073E-09	6.262E-09	3.845E-09	2.709E-09	2.061E-09	1.648E-09	1.362E-09	1.148E-09	9.813E-10	8.470E-10
SW	1.640E-08	8.970E-09	5.952E-09	3.461E-09	2.344E-09	1.729E-09	1.346E-09	1.086E-09	8.965E-10	7.530E-10	6.417E-10

WSW	1.305E-08	7.096E-09	4.705E-09	2.742E-09	1.852E-09	1.345E-09	1.025E-09	8.099E-10	6.576E-10	5.461E-10	4.616E-10
W	1.350E-08	7.715E-09	5.314E-09	3.204E-09	2.145E-09	1.543E-09	1.163E-09	9.132E-10	7.399E-10	6.138E-10	5.188E-10
WNW	1.615E-08	9.683E-09	6.950E-09	4.420E-09	3.040E-09	2.196E-09	1.665E-09	1.316E-09	1.071E-09	8.930E-10	7.580E-10
NW	1.511E-08	9.051E-09	6.505E-09	4.248E-09	3.022E-09	2.268E-09	1.763E-09	1.402E-09	1.145E-09	9.572E-10	8.142E-10
NNW	1.564E-08	1.001E-08	7.488E-09	5.010E-09	3.532E-09	2.606E-09	1.991E-09	1.577E-09	1.287E-09	1.074E-09	9.133E-10
N	2.168E-08	1.367E-08	1.005E-08	6.681E-09	4.726E-09	3.514E-09	2.711E-09	2.146E-09	1.747E-09	1.456E-09	1.235E-09
NNE	3.738E-08	2.163E-08	1.497E-08	9.258E-09	6.555E-09	5.003E-09	4.008E-09	3.317E-09	2.803E-09	2.415E-09	2.107E-09
NE	3.706E-08	2.159E-08	1.499E-08	9.305E-09	6.609E-09	5.062E-09	4.069E-09	3.381E-09	2.868E-09	2.481E-09	2.175E-09
ENE	3.523E-08	2.154E-08	1.541E-08	9.949E-09	7.261E-09	5.681E-09	4.651E-09	3.927E-09	3.378E-09	2.961E-09	2.626E-09
E	2.713E-08	1.670E-08	1.198E-08	7.732E-09	5.617E-09	4.361E-09	3.537E-09	2.956E-09	2.521E-09	2.190E-09	1.926E-09
ESE	2.838E-08	1.808E-08	1.333E-08	8.974E-09	6.734E-09	5.373E-09	4.461E-09	3.808E-09	3.303E-09	2.914E-09	2.599E-09
SE	2.461E-08	1.527E-08	1.104E-08	7.223E-09	5.317E-09	4.185E-09	3.441E-09	2.915E-09	2.514E-09	2.209E-09	1.964E-09
SSE	2.119E-08	1.325E-08	9.737E-09	6.651E-09	5.127E-09	4.193E-09	3.487E-09	2.933E-09	2.502E-09	2.153E-09	1.870E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.550	LESS THAN 2.348
MIXED	BETWEEN 1.550 AND 7.751	BETWEEN 2.348 AND 11.739
GROUND LEVEL	ABOVE 7.751	ABOVE 11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.517E-07	9.471E-08	4.591E-08	2.869E-08	2.019E-08	1.078E-08	4.948E-09	2.871E-09	1.987E-09	1.463E-09
SSW	2.009E-07	8.559E-08	4.298E-08	2.648E-08	1.829E-08	9.280E-09	3.877E-09	2.069E-09	1.362E-09	9.810E-10
SW	2.804E-07	1.125E-07	5.077E-08	2.939E-08	1.952E-08	9.279E-09	3.518E-09	1.740E-09	1.088E-09	7.543E-10
WSW	2.708E-07	9.714E-08	4.105E-08	2.320E-08	1.540E-08	7.356E-09	2.783E-09	1.352E-09	8.134E-10	5.478E-10
W	3.183E-07	1.064E-07	4.354E-08	2.451E-08	1.611E-08	7.933E-09	3.202E-09	1.551E-09	9.184E-10	6.160E-10
WNW	3.438E-07	1.173E-07	5.003E-08	2.875E-08	1.916E-08	9.906E-09	4.369E-09	2.209E-09	1.322E-09	8.958E-10
NW	3.254E-07	1.052E-07	4.505E-08	2.619E-08	1.773E-08	9.265E-09	4.205E-09	2.267E-09	1.407E-09	9.600E-10
NNW	2.952E-07	9.547E-08	4.272E-08	2.575E-08	1.802E-08	1.014E-08	4.904E-09	2.607E-09	1.585E-09	1.078E-09
N	3.388E-07	1.222E-07	5.801E-08	3.572E-08	2.507E-08	1.384E-08	6.561E-09	3.516E-09	2.156E-09	1.460E-09
NNE	6.816E-07	2.232E-07	9.893E-08	6.113E-08	4.352E-08	2.217E-08	9.326E-09	5.019E-09	3.319E-09	2.416E-09
NE	5.550E-07	2.156E-07	1.029E-07	6.275E-08	4.334E-08	2.210E-08	9.370E-09	5.077E-09	3.382E-09	2.482E-09
ENE	3.294E-07	1.543E-07	8.651E-08	5.649E-08	4.057E-08	2.186E-08	9.968E-09	5.690E-09	3.924E-09	2.960E-09
E	2.625E-07	1.164E-07	6.473E-08	4.275E-08	3.106E-08	1.692E-08	7.736E-09	4.366E-09	2.957E-09	2.191E-09
ESE	2.706E-07	1.163E-07	6.520E-08	4.376E-08	3.228E-08	1.826E-08	8.946E-09	5.371E-09	3.802E-09	2.912E-09
SE	2.318E-07	1.034E-07	5.854E-08	3.879E-08	2.819E-08	1.547E-08	7.224E-09	4.190E-09	2.913E-09	2.209E-09
SSE	2.562E-07	1.058E-07	5.464E-08	3.464E-08	2.452E-08	1.345E-08	6.660E-09	4.160E-09	2.927E-09	2.151E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.787E-08	9.225E-09	5.746E-09	3.117E-09	1.271E-09	6.818E-10	4.230E-10	2.880E-10	2.087E-10	1.582E-10	1.240E-10
SSW	1.393E-08	7.387E-09	4.722E-09	2.618E-09	1.089E-09	5.924E-10	3.711E-10	2.542E-10	1.849E-10	1.405E-10	1.103E-10
SW	1.964E-08	1.080E-08	7.021E-09	3.896E-09	1.623E-09	8.739E-10	5.427E-10	3.696E-10	2.679E-10	2.030E-10	1.592E-10
WSW	2.364E-08	1.231E-08	7.566E-09	4.042E-09	1.629E-09	8.609E-10	5.284E-10	3.572E-10	2.576E-10	1.947E-10	1.525E-10
W	3.098E-08	1.498E-08	8.799E-09	4.683E-09	1.849E-09	9.621E-10	5.842E-10	3.919E-10	2.812E-10	2.117E-10	1.654E-10
WNW	3.293E-08	1.672E-08	9.777E-09	5.230E-09	2.037E-09	1.059E-09	6.436E-10	4.323E-10	3.106E-10	2.343E-10	1.833E-10
NW	3.046E-08	1.598E-08	9.347E-09	4.979E-09	1.912E-09	9.908E-10	6.017E-10	4.041E-10	2.904E-10	2.192E-10	1.716E-10
NNW	2.560E-08	1.298E-08	7.482E-09	3.797E-09	1.431E-09	7.439E-10	4.535E-10	3.056E-10	2.203E-10	1.667E-10	1.307E-10
N	2.409E-08	1.210E-08	7.197E-09	3.737E-09	1.441E-09	7.557E-10	4.630E-10	3.129E-10	2.258E-10	1.709E-10	1.340E-10
NNE	5.377E-08	2.552E-08	1.482E-08	7.640E-09	2.974E-09	1.553E-09	9.467E-10	6.371E-10	4.583E-10	3.458E-10	2.704E-10
NE	4.735E-08	2.442E-08	1.519E-08	8.230E-09	3.373E-09	1.800E-09	1.112E-09	7.543E-10	5.453E-10	4.126E-10	3.231E-10
ENE	2.780E-08	1.523E-08	9.593E-09	5.275E-09	2.177E-09	1.186E-09	7.448E-10	5.113E-10	3.726E-10	2.834E-10	2.227E-10
E	2.355E-08	1.315E-08	8.209E-09	4.450E-09	1.795E-09	9.714E-10	6.079E-10	4.167E-10	3.036E-10	2.310E-10	1.817E-10
ESE	2.561E-08	1.419E-08	8.748E-09	4.679E-09	1.858E-09	9.967E-10	6.202E-10	4.237E-10	3.080E-10	2.341E-10	1.841E-10
SE	2.179E-08	1.208E-08	7.441E-09	3.994E-09	1.593E-09	8.591E-10	5.366E-10	3.675E-10	2.676E-10	2.036E-10	1.601E-10
SSE	2.134E-08	1.151E-08	7.121E-09	3.854E-09	1.562E-09	8.443E-10	5.275E-10	3.611E-10	2.627E-10	1.997E-10	1.569E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.983E-11	4.609E-11	2.784E-11	1.455E-11	9.251E-12	6.712E-12	6.386E-12	7.975E-12	7.180E-12	6.172E-12	5.025E-12
SSW	8.879E-11	4.112E-11	2.486E-11	1.298E-11	8.222E-12	5.903E-12	4.814E-12	4.275E-12	4.384E-12	4.705E-12	3.992E-12
SW	1.281E-10	5.895E-11	3.579E-11	1.828E-11	1.153E-11	8.209E-12	6.467E-12	5.765E-12	5.760E-12	4.971E-12	4.160E-12
WSW	1.249E-10	5.693E-11	3.408E-11	1.919E-11	1.434E-11	1.209E-11	9.094E-12	6.965E-12	5.401E-12	4.384E-12	3.593E-12
W	1.329E-10	6.063E-11	4.049E-11	3.015E-11	1.944E-11	1.339E-11	9.759E-12	7.364E-12	5.728E-12	4.577E-12	3.737E-12
WNW	1.475E-10	6.847E-11	5.289E-11	3.789E-11	2.357E-11	1.625E-11	1.176E-11	8.835E-12	6.872E-12	5.496E-12	4.487E-12
NW	1.382E-10	6.369E-11	4.251E-11	3.621E-11	2.435E-11	1.598E-11	1.125E-11	8.486E-12	6.588E-12	5.266E-12	4.300E-12
NNW	1.079E-10	4.972E-11	3.510E-11	3.585E-11	2.210E-11	1.425E-11	1.024E-11	7.738E-12	6.021E-12	4.813E-12	3.926E-12
N	1.080E-10	5.087E-11	3.168E-11	4.047E-11	2.870E-11	1.750E-11	1.220E-11	9.193E-12	7.159E-12	5.723E-12	4.674E-12
NNE	2.175E-10	1.000E-10	6.065E-11	3.193E-11	2.045E-11	1.475E-11	1.146E-11	9.780E-12	8.213E-12	8.668E-12	7.393E-12
NE	2.600E-10	1.193E-10	7.167E-11	3.706E-11	2.353E-11	1.672E-11	1.279E-11	1.024E-11	8.629E-12	7.311E-12	6.637E-12
ENE	1.796E-10	8.362E-11	5.082E-11	2.672E-11	1.715E-11	1.235E-11	9.565E-12	7.756E-12	6.536E-12	5.603E-12	4.987E-12
E	1.466E-10	6.865E-11	4.195E-11	2.226E-11	1.428E-11	1.045E-11	8.117E-12	6.557E-12	5.463E-12	4.634E-12	4.008E-12
ESE	1.486E-10	6.960E-11	4.259E-11	2.268E-11	1.461E-11	1.079E-11	8.478E-12	7.001E-12	5.945E-12	5.134E-12	4.500E-12
SE	1.293E-10	6.064E-11	3.715E-11	1.981E-11	1.277E-11	9.415E-12	7.310E-12	5.972E-12	5.055E-12	4.351E-12	3.823E-12
SSE	1.265E-10	5.898E-11	3.645E-11	1.906E-11	1.267E-11	1.530E-11	1.482E-11	1.163E-11	9.017E-12	6.784E-12	5.275E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Reactor Bldg/Fuel Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.350E-09	1.419E-09	4.380E-10	2.121E-10	1.252E-10	4.992E-11	1.515E-11	7.259E-12	7.218E-12	6.046E-12
SSW	4.379E-09	1.208E-09	3.833E-10	1.878E-10	1.113E-10	4.449E-11	1.351E-11	6.086E-12	4.470E-12	4.346E-12
SW	6.472E-09	1.795E-09	5.618E-10	2.723E-10	1.607E-10	6.403E-11	1.917E-11	8.397E-12	5.964E-12	4.904E-12
WSW	7.053E-09	1.824E-09	5.486E-10	2.621E-10	1.548E-10	6.188E-11	2.034E-11	1.149E-11	6.977E-12	4.392E-12
W	8.344E-09	2.085E-09	6.081E-10	2.863E-10	1.671E-10	6.774E-11	2.769E-11	1.355E-11	7.425E-12	4.607E-12
WNW	9.300E-09	2.312E-09	6.698E-10	3.163E-10	1.851E-10	7.911E-11	3.486E-11	1.641E-11	8.924E-12	5.530E-12
NW	8.880E-09	2.184E-09	6.264E-10	2.957E-10	1.733E-10	7.084E-11	3.234E-11	1.632E-11	8.554E-12	5.300E-12
NNW	7.066E-09	1.652E-09	4.718E-10	2.242E-10	1.329E-10	5.614E-11	2.957E-11	1.474E-11	7.800E-12	4.843E-12
N	6.749E-09	1.647E-09	4.810E-10	2.297E-10	1.353E-10	5.504E-11	3.329E-11	1.837E-11	9.276E-12	5.760E-12
NNE	1.401E-08	3.379E-09	9.844E-10	4.665E-10	2.732E-10	1.086E-10	3.321E-11	1.495E-11	9.662E-12	8.061E-12

NE	1.415E-08	3.753E-09	1.152E-09	5.545E-10	3.262E-10	1.294E-10	3.874E-11	1.696E-11	1.035E-11	7.452E-12
ENE	8.927E-09	2.425E-09	7.691E-10	3.782E-10	2.247E-10	9.036E-11	2.782E-11	1.251E-11	7.808E-12	5.651E-12
E	7.637E-09	2.019E-09	6.284E-10	3.082E-10	1.833E-10	7.411E-11	2.309E-11	1.054E-11	6.586E-12	4.648E-12
ESE	8.150E-09	2.102E-09	6.420E-10	3.129E-10	1.857E-10	7.515E-11	2.352E-11	1.088E-11	7.021E-12	5.140E-12
SE	6.940E-09	1.800E-09	5.550E-10	2.717E-10	1.616E-10	6.545E-11	2.053E-11	9.466E-12	6.005E-12	4.364E-12
SSE	6.644E-09	1.752E-09	5.454E-10	2.668E-10	1.583E-10	6.397E-11	2.008E-11	1.440E-11	1.155E-11	6.887E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.550	LESS THAN	2.348
MIXED	BETWEEN	1.550 AND 7.751	BETWEEN	2.348 AND 11.739
GROUND LEVEL	ABOVE	7.751	ABOVE	11.739

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

0Fermi COL A (using distances from TB Vent Stack)

0Reactor Bldg/Fuel Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+							
+							
		UNDEPLETED		UNDEPLETED		DEPLETED	
	Site Boundary	S	.76	2.8E-07	2.8E-07	2.6E-07	5.6E-09
	Site Boundary	SSW	.78	2.1E-07	2.1E-07	2.0E-07	4.4E-09
	Site Boundary	SW	.97	2.2E-07	2.2E-07	2.0E-07	4.2E-09
	Site Boundary	WSW	.75	3.0E-07	3.0E-07	2.8E-07	7.6E-09
	Site Boundary	W	.62	4.3E-07	4.3E-07	4.0E-07	1.1E-08
	Site Boundary	WNW	.56	5.2E-07	5.2E-07	4.9E-07	1.5E-08
	Site Boundary	NW	.55	5.2E-07	5.2E-07	4.9E-07	1.4E-08
	Site Boundary	NNW	.55	4.8E-07	4.8E-07	4.5E-07	1.2E-08
	Site Boundary	N	.63	4.5E-07	4.5E-07	4.1E-07	9.1E-09
	Site Boundary	NNE	.91	5.2E-07	5.2E-07	4.8E-07	9.4E-09
	Site Boundary	NE	1.20	3.1E-07	3.1E-07	2.9E-07	5.6E-09
	Site Boundary	SSE	.76	2.8E-07	2.8E-07	2.6E-07	7.0E-09
	Residence	SSE	.97	1.9E-07	1.9E-07	1.8E-07	4.1E-09
	Residence	SSW	.95	1.6E-07	1.6E-07	1.5E-07	2.9E-09
	Residence	SW	1.07	1.9E-07	1.9E-07	1.8E-07	3.4E-09
	Residence	WSW	1.08	1.7E-07	1.7E-07	1.6E-07	3.4E-09
	Residence	W	1.01	2.1E-07	2.1E-07	2.0E-07	4.5E-09
	Residence	NW	.66	4.0E-07	4.0E-07	3.7E-07	1.1E-08
	Residence	NW	1.04	1.9E-07	1.9E-07	1.8E-07	4.5E-09
	Residence	NNW	1.17	1.5E-07	1.4E-07	1.3E-07	2.6E-09
	Residence	NNE	1.29	3.0E-07	3.0E-07	2.7E-07	4.3E-09
	Residence	NNE	1.22	3.2E-07	3.2E-07	3.0E-07	4.8E-09
	Residence	NE	1.28	2.8E-07	2.8E-07	2.6E-07	4.8E-09
	Garden	S	1.34	1.2E-07	1.2E-07	1.1E-07	1.6E-09
	Garden	WSW	2.09	5.9E-08	5.9E-08	5.4E-08	7.8E-10
	Garden	W	1.54	1.0E-07	1.0E-07	9.7E-08	1.7E-09
	Garden	NW	.66	4.0E-07	4.0E-07	3.7E-07	1.1E-08
	Garden	NNW	1.07	1.7E-07	1.7E-07	1.5E-07	3.3E-09
	Garden	NNW	1.44	1.1E-07	1.0E-07	9.7E-08	1.6E-09

Garden	N	2.34	6.8E-08	6.7E-08	6.3E-08	5.3E-10
Garden	NNE	2.12	1.4E-07	1.4E-07	1.2E-07	1.4E-09
Garden	NE	2.16	1.4E-07	1.3E-07	1.3E-07	1.5E-09
Sheep	NNW	4.43	2.0E-08	2.0E-08	1.8E-08	1.3E-10
Sheep	NNE	4.46	4.8E-08	4.8E-08	4.4E-08	2.8E-10
Goat	WNW	2.29	6.2E-08	6.2E-08	5.7E-08	7.8E-10
Goat	NNW	3.06	3.4E-08	3.4E-08	3.1E-08	2.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	52.62	REP. WIND HEIGHT	(METERS)	52.6
DIAMETER	(METERS)	2.40	BUILDING HEIGHT	(METERS)	48.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.550	LESS THAN	2.348
MIXED	BETWEEN	1.550 AND 7.751	BETWEEN	2.348 AND 11.739
GROUND LEVEL	ABOVE	7.751	ABOVE	11.739

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack

NO DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.573E-06	5.571E-07	3.247E-07	1.841E-07	9.270E-08	5.992E-08	4.328E-08	3.333E-08	2.679E-08	2.220E-08	1.884E-08
SSW	1.104E-06	4.051E-07	2.451E-07	1.456E-07	7.866E-08	5.255E-08	3.847E-08	2.975E-08	2.390E-08	1.976E-08	1.670E-08
SW	1.318E-06	4.872E-07	2.977E-07	1.813E-07	9.805E-08	6.392E-08	4.564E-08	3.455E-08	2.726E-08	2.220E-08	1.853E-08
WSW	1.323E-06	4.817E-07	2.832E-07	1.662E-07	8.516E-08	5.372E-08	3.757E-08	2.805E-08	2.193E-08	1.773E-08	1.488E-08
W	1.817E-06	6.197E-07	3.540E-07	2.008E-07	9.768E-08	6.007E-08	4.147E-08	3.074E-08	2.394E-08	1.932E-08	1.602E-08
WNW	2.105E-06	6.935E-07	3.838E-07	2.173E-07	1.078E-07	6.733E-08	4.700E-08	3.514E-08	2.754E-08	2.235E-08	1.863E-08
NW	2.048E-06	6.823E-07	3.660E-07	2.013E-07	9.813E-08	6.110E-08	4.269E-08	3.199E-08	2.515E-08	2.048E-08	1.719E-08
NNW	2.002E-06	6.562E-07	3.513E-07	1.905E-07	9.135E-08	5.698E-08	4.013E-08	3.036E-08	2.409E-08	1.978E-08	1.683E-08
N	2.181E-06	7.420E-07	4.171E-07	2.323E-07	1.151E-07	7.346E-08	5.261E-08	4.028E-08	3.224E-08	2.664E-08	2.267E-08
NNE	4.422E-06	1.508E-06	8.504E-07	4.635E-07	2.193E-07	1.357E-07	9.519E-08	7.183E-08	5.804E-08	4.850E-08	4.096E-08
NE	3.110E-06	1.134E-06	6.726E-07	3.879E-07	2.001E-07	1.299E-07	9.351E-08	7.161E-08	5.720E-08	4.714E-08	3.978E-08
ENE	2.042E-06	7.337E-07	4.306E-07	2.553E-07	1.436E-07	9.960E-08	7.510E-08	5.947E-08	4.872E-08	4.094E-08	3.510E-08
E	1.442E-06	5.426E-07	3.192E-07	1.880E-07	1.052E-07	7.297E-08	5.525E-08	4.397E-08	3.620E-08	3.057E-08	2.633E-08
ESE	1.870E-06	6.580E-07	3.707E-07	2.113E-07	1.132E-07	7.711E-08	5.792E-08	4.597E-08	3.785E-08	3.200E-08	2.762E-08
SE	1.564E-06	5.521E-07	3.121E-07	1.797E-07	9.864E-08	6.803E-08	5.134E-08	4.077E-08	3.352E-08	2.827E-08	2.432E-08
SSE	1.629E-06	5.764E-07	3.336E-07	1.928E-07	1.024E-07	6.829E-08	5.016E-08	3.900E-08	3.153E-08	2.623E-08	2.232E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.629E-08	9.906E-09	7.108E-09	4.640E-09	3.432E-09	2.722E-09	2.257E-09	1.931E-09	1.689E-09	1.503E-09	1.353E-09
SSW	1.438E-08	8.497E-09	5.942E-09	3.718E-09	2.657E-09	2.045E-09	1.651E-09	1.379E-09	1.181E-09	1.031E-09	9.131E-10
SW	1.578E-08	8.905E-09	6.043E-09	3.631E-09	2.521E-09	1.897E-09	1.504E-09	1.236E-09	1.043E-09	8.979E-10	7.857E-10
WSW	1.275E-08	7.155E-09	4.855E-09	2.930E-09	2.045E-09	1.546E-09	1.230E-09	1.013E-09	8.561E-10	7.374E-10	6.445E-10
W	1.359E-08	7.876E-09	5.494E-09	3.468E-09	2.497E-09	1.916E-09	1.518E-09	1.236E-09	1.034E-09	8.845E-10	7.692E-10
WNW	1.586E-08	9.499E-09	6.827E-09	4.563E-09	3.426E-09	2.668E-09	2.110E-09	1.725E-09	1.450E-09	1.244E-09	1.086E-09
NW	1.475E-08	8.826E-09	6.345E-09	4.247E-09	3.235E-09	2.617E-09	2.175E-09	1.827E-09	1.548E-09	1.334E-09	1.167E-09

NNW	1.462E-08	9.238E-09	6.909E-09	4.854E-09	3.763E-09	3.016E-09	2.434E-09	2.000E-09	1.685E-09	1.450E-09	1.268E-09
N	1.968E-08	1.239E-08	9.153E-09	6.258E-09	4.770E-09	3.832E-09	3.156E-09	2.628E-09	2.212E-09	1.898E-09	1.655E-09
NNE	3.531E-08	2.063E-08	1.444E-08	9.098E-09	6.541E-09	5.057E-09	4.096E-09	3.428E-09	2.938E-09	2.565E-09	2.272E-09
NE	3.424E-08	2.018E-08	1.416E-08	8.933E-09	6.428E-09	4.974E-09	4.034E-09	3.381E-09	2.904E-09	2.540E-09	2.255E-09
ENE	3.061E-08	1.888E-08	1.360E-08	8.877E-09	6.532E-09	5.146E-09	4.238E-09	3.601E-09	3.131E-09	2.771E-09	2.488E-09
E	2.306E-08	1.429E-08	1.031E-08	6.730E-09	4.938E-09	3.869E-09	3.164E-09	2.667E-09	2.298E-09	2.015E-09	1.791E-09
ESE	2.425E-08	1.530E-08	1.123E-08	7.539E-09	5.662E-09	4.529E-09	3.772E-09	3.234E-09	2.831E-09	2.519E-09	2.270E-09
SE	2.128E-08	1.325E-08	9.606E-09	6.321E-09	4.678E-09	3.700E-09	3.056E-09	2.603E-09	2.267E-09	2.010E-09	1.806E-09
SSE	1.934E-08	1.201E-08	8.768E-09	5.931E-09	4.552E-09	3.746E-09	3.216E-09	2.836E-09	2.542E-09	2.300E-09	2.092E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack
NO DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.139E-07	9.845E-08	4.374E-08	2.691E-08	1.889E-08	1.008E-08	4.652E-09	2.725E-09	1.932E-09	1.503E-09
SSW	2.364E-07	8.194E-08	3.873E-08	2.399E-08	1.675E-08	8.669E-09	3.740E-09	2.051E-09	1.382E-09	1.032E-09
SW	2.881E-07	1.014E-07	4.608E-08	2.742E-08	1.860E-08	9.159E-09	3.674E-09	1.906E-09	1.239E-09	8.993E-10
WSW	2.753E-07	8.920E-08	3.807E-08	2.208E-08	1.494E-08	7.376E-09	2.965E-09	1.553E-09	1.015E-09	7.382E-10
W	3.450E-07	1.039E-07	4.214E-08	2.412E-08	1.610E-08	8.087E-09	3.487E-09	1.912E-09	1.240E-09	8.862E-10
WNW	3.787E-07	1.141E-07	4.768E-08	2.774E-08	1.871E-08	9.725E-09	4.561E-09	2.647E-09	1.730E-09	1.247E-09
NW	3.631E-07	1.046E-07	4.332E-08	2.533E-08	1.726E-08	9.039E-09	4.264E-09	2.605E-09	1.820E-09	1.335E-09
NNW	3.476E-07	9.810E-08	4.071E-08	2.424E-08	1.689E-08	9.400E-09	4.826E-09	2.982E-09	2.004E-09	1.452E-09
N	4.072E-07	1.226E-07	5.324E-08	3.240E-08	2.274E-08	1.257E-08	6.240E-09	3.812E-09	2.620E-09	1.901E-09
NNE	8.247E-07	2.364E-07	9.665E-08	5.835E-08	4.110E-08	2.114E-08	9.148E-09	5.069E-09	3.432E-09	2.567E-09
NE	6.486E-07	2.106E-07	9.445E-08	5.748E-08	3.991E-08	2.063E-08	8.981E-09	4.986E-09	3.386E-09	2.542E-09
ENE	4.200E-07	1.488E-07	7.538E-08	4.883E-08	3.517E-08	1.914E-08	8.885E-09	5.153E-09	3.604E-09	2.773E-09
E	3.105E-07	1.093E-07	5.547E-08	3.628E-08	2.637E-08	1.447E-08	6.730E-09	3.872E-09	2.668E-09	2.016E-09
ESE	3.637E-07	1.190E-07	5.826E-08	3.794E-08	2.767E-08	1.548E-08	7.525E-09	4.528E-09	3.234E-09	2.519E-09
SE	3.066E-07	1.030E-07	5.156E-08	3.359E-08	2.436E-08	1.341E-08	6.320E-09	3.703E-09	2.605E-09	2.011E-09
SSE	3.250E-07	1.073E-07	5.053E-08	3.164E-08	2.238E-08	1.220E-08	5.948E-09	3.749E-09	2.833E-09	2.295E-09

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.237E+01	9.237E+01	9.237E+01	9.237E+01	9.237E+01	8.933E+01	8.130E+01	7.178E+01	6.200E+01	5.214E+01
SSW	9.181E+01	9.142E+01	9.142E+01	9.142E+01	9.142E+01	8.905E+01	8.279E+01	7.536E+01	6.774E+01	6.006E+01
SW	8.991E+01	8.915E+01	8.915E+01	8.915E+01	8.915E+01	8.691E+01	8.101E+01	7.400E+01	6.680E+01	5.955E+01
WSW	8.694E+01	8.600E+01	8.600E+01	8.600E+01	8.439E+01	7.894E+01	6.823E+01	5.553E+01	4.249E+01	2.933E+01
W	8.153E+01	8.022E+01	8.022E+01	8.022E+01	8.022E+01	7.063E+01	4.534E+01	1.631E+01	2.086E+00	9.013E-01
WNW	8.411E+01	8.258E+01	8.258E+01	8.258E+01	8.258E+01	7.137E+01	4.181E+01	1.113E+01	1.006E+00	5.691E-01
NW	8.818E+01	8.688E+01	8.688E+01	8.688E+01	8.634E+01	7.821E+01	5.801E+01	3.404E+01	1.178E+01	2.957E+00
NNW	8.811E+01	8.717E+01	8.717E+01	8.717E+01	8.610E+01	7.488E+01	4.772E+01	1.685E+01	2.338E+00	1.160E+00

N	8.907E+01	8.833E+01	8.833E+01	8.833E+01	8.780E+01	7.895E+01	5.683E+01	3.059E+01	8.600E+00	2.056E+00
NNE	8.938E+01	8.941E+01	8.941E+01	8.723E+01	8.490E+01	8.329E+01	8.026E+01	7.667E+01	7.299E+01	6.927E+01
NE	9.110E+01	9.112E+01	9.112E+01	9.112E+01	9.112E+01	8.963E+01	8.570E+01	8.104E+01	7.626E+01	7.143E+01
ENE	9.526E+01	9.527E+01	9.527E+01	9.527E+01	9.527E+01	9.378E+01	8.985E+01	8.518E+01	8.039E+01	7.556E+01
E	9.725E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01	9.727E+01
ESE	9.564E+01	9.565E+01	9.565E+01	9.565E+01	9.565E+01	9.517E+01	9.392E+01	9.244E+01	9.091E+01	8.937E+01
SE	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.570E+01	9.475E+01	9.224E+01	8.927E+01	8.622E+01	8.314E+01
SSE	9.413E+01	9.413E+01	9.413E+01	9.413E+01	9.413E+01	8.952E+01	7.736E+01	6.293E+01	4.812E+01	3.319E+01

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack

2.260 DAY DECAY, UNDEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.572E-06	5.565E-07	3.242E-07	1.838E-07	9.244E-08	5.970E-08	4.307E-08	3.314E-08	2.661E-08	2.203E-08	1.867E-08
SSW	1.104E-06	4.047E-07	2.447E-07	1.454E-07	7.844E-08	5.236E-08	3.829E-08	2.958E-08	2.375E-08	1.961E-08	1.656E-08
SW	1.317E-06	4.867E-07	2.973E-07	1.810E-07	9.780E-08	6.371E-08	4.545E-08	3.437E-08	2.710E-08	2.204E-08	1.838E-08
WSW	1.323E-06	4.813E-07	2.828E-07	1.659E-07	8.496E-08	5.355E-08	3.742E-08	2.792E-08	2.180E-08	1.761E-08	1.477E-08
W	1.817E-06	6.192E-07	3.536E-07	2.005E-07	9.746E-08	5.989E-08	4.131E-08	3.060E-08	2.380E-08	1.919E-08	1.590E-08
WNW	2.104E-06	6.929E-07	3.834E-07	2.170E-07	1.075E-07	6.711E-08	4.681E-08	3.497E-08	2.739E-08	2.221E-08	1.849E-08
NW	2.047E-06	6.816E-07	3.654E-07	2.009E-07	9.785E-08	6.087E-08	4.249E-08	3.181E-08	2.498E-08	2.032E-08	1.704E-08
NNW	2.001E-06	6.555E-07	3.508E-07	1.901E-07	9.109E-08	5.677E-08	3.994E-08	3.019E-08	2.393E-08	1.964E-08	1.669E-08
N	2.180E-06	7.412E-07	4.165E-07	2.319E-07	1.147E-07	7.318E-08	5.235E-08	4.003E-08	3.201E-08	2.642E-08	2.246E-08
NNE	4.420E-06	1.507E-06	8.493E-07	4.627E-07	2.187E-07	1.352E-07	9.477E-08	7.145E-08	5.768E-08	4.816E-08	4.062E-08
NE	3.108E-06	1.133E-06	6.716E-07	3.872E-07	1.996E-07	1.295E-07	9.311E-08	7.124E-08	5.685E-08	4.680E-08	3.946E-08
ENE	2.041E-06	7.328E-07	4.299E-07	2.547E-07	1.431E-07	9.919E-08	7.472E-08	5.910E-08	4.836E-08	4.059E-08	3.477E-08
E	1.442E-06	5.419E-07	3.186E-07	1.876E-07	1.048E-07	7.266E-08	5.495E-08	4.368E-08	3.592E-08	3.029E-08	2.605E-08
ESE	1.869E-06	6.572E-07	3.701E-07	2.109E-07	1.129E-07	7.678E-08	5.761E-08	4.567E-08	3.756E-08	3.172E-08	2.734E-08
SE	1.563E-06	5.514E-07	3.116E-07	1.793E-07	9.833E-08	6.774E-08	5.107E-08	4.051E-08	3.327E-08	2.802E-08	2.408E-08
SSE	1.628E-06	5.758E-07	3.331E-07	1.924E-07	1.021E-07	6.803E-08	4.991E-08	3.877E-08	3.131E-08	2.602E-08	2.211E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.613E-08	9.755E-09	6.962E-09	4.496E-09	3.289E-09	2.580E-09	2.117E-09	1.792E-09	1.551E-09	1.365E-09	1.217E-09
SSW	1.425E-08	8.379E-09	5.831E-09	3.613E-09	2.556E-09	1.948E-09	1.558E-09	1.288E-09	1.092E-09	9.437E-10	8.275E-10
SW	1.563E-08	8.780E-09	5.927E-09	3.523E-09	2.420E-09	1.801E-09	1.412E-09	1.147E-09	9.574E-10	8.155E-10	7.060E-10
WSW	1.264E-08	7.058E-09	4.765E-09	2.845E-09	1.964E-09	1.468E-09	1.155E-09	9.411E-10	7.866E-10	6.702E-10	5.797E-10
W	1.347E-08	7.774E-09	5.396E-09	3.372E-09	2.405E-09	1.827E-09	1.434E-09	1.156E-09	9.589E-10	8.125E-10	7.003E-10
WNW	1.573E-08	9.382E-09	6.713E-09	4.444E-09	3.305E-09	2.548E-09	1.996E-09	1.617E-09	1.346E-09	1.145E-09	9.903E-10
NW	1.460E-08	8.693E-09	6.214E-09	4.111E-09	3.095E-09	2.475E-09	2.033E-09	1.689E-09	1.414E-09	1.205E-09	1.044E-09
NNW	1.449E-08	9.105E-09	6.773E-09	4.705E-09	3.604E-09	2.852E-09	2.272E-09	1.845E-09	1.538E-09	1.308E-09	1.132E-09
N	1.947E-08	1.218E-08	8.947E-09	6.039E-09	4.544E-09	3.603E-09	2.930E-09	2.409E-09	2.003E-09	1.698E-09	1.463E-09
NNE	3.498E-08	2.034E-08	1.416E-08	8.828E-09	6.279E-09	4.802E-09	3.848E-09	3.186E-09	2.703E-09	2.335E-09	2.048E-09
NE	3.393E-08	1.990E-08	1.389E-08	8.667E-09	6.167E-09	4.718E-09	3.784E-09	3.135E-09	2.662E-09	2.303E-09	2.022E-09
ENE	3.028E-08	1.857E-08	1.330E-08	8.566E-09	6.224E-09	4.840E-09	3.935E-09	3.300E-09	2.833E-09	2.475E-09	2.193E-09
E	2.279E-08	1.403E-08	1.006E-08	6.474E-09	4.684E-09	3.619E-09	2.919E-09	2.427E-09	2.063E-09	1.784E-09	1.564E-09
ESE	2.397E-08	1.503E-08	1.096E-08	7.267E-09	5.388E-09	4.254E-09	3.498E-09	2.961E-09	2.559E-09	2.248E-09	2.001E-09
SE	2.104E-08	1.302E-08	9.385E-09	6.100E-09	4.458E-09	3.483E-09	2.841E-09	2.390E-09	2.056E-09	1.800E-09	1.597E-09
SSE	1.915E-08	1.182E-08	8.580E-09	5.734E-09	4.348E-09	3.534E-09	2.997E-09	2.611E-09	2.312E-09	2.067E-09	1.857E-09

VENT AND BUILDING PARAMETERS:
RELEASE HEIGHT (METERS) 71.30 REP. WIND HEIGHT (METERS) 71.3

DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack
2.260 DAY DECAY, UNDEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.134E-07	9.818E-08	4.353E-08	2.673E-08	1.872E-08	9.930E-09	4.507E-09	2.584E-09	1.793E-09	1.366E-09
SSW	2.361E-07	8.172E-08	3.856E-08	2.384E-08	1.661E-08	8.551E-09	3.636E-09	1.954E-09	1.291E-09	9.447E-10
SW	2.877E-07	1.011E-07	4.589E-08	2.725E-08	1.845E-08	9.035E-09	3.567E-09	1.810E-09	1.150E-09	8.170E-10
WSW	2.750E-07	8.900E-08	3.792E-08	2.195E-08	1.482E-08	7.280E-09	2.880E-09	1.475E-09	9.434E-10	6.712E-10
W	3.446E-07	1.037E-07	4.198E-08	2.399E-08	1.598E-08	7.984E-09	3.392E-09	1.824E-09	1.160E-09	8.143E-10
WNW	3.782E-07	1.139E-07	4.749E-08	2.758E-08	1.857E-08	9.607E-09	4.442E-09	2.529E-09	1.622E-09	1.147E-09
NW	3.626E-07	1.043E-07	4.312E-08	2.516E-08	1.711E-08	8.905E-09	4.127E-09	2.464E-09	1.683E-09	1.207E-09
NNW	3.471E-07	9.783E-08	4.053E-08	2.408E-08	1.675E-08	9.265E-09	4.675E-09	2.820E-09	1.850E-09	1.311E-09
N	4.066E-07	1.223E-07	5.298E-08	3.217E-08	2.253E-08	1.236E-08	6.021E-09	3.585E-09	2.403E-09	1.701E-09
NNE	8.236E-07	2.358E-07	9.623E-08	5.799E-08	4.077E-08	2.085E-08	8.879E-09	4.814E-09	3.191E-09	2.338E-09
NE	6.477E-07	2.101E-07	9.405E-08	5.713E-08	3.959E-08	2.035E-08	8.716E-09	4.731E-09	3.140E-09	2.305E-09
ENE	4.193E-07	1.484E-07	7.500E-08	4.847E-08	3.483E-08	1.883E-08	8.576E-09	4.847E-09	3.303E-09	2.477E-09
E	3.100E-07	1.089E-07	5.517E-08	3.599E-08	2.610E-08	1.421E-08	6.475E-09	3.623E-09	2.429E-09	1.785E-09
ESE	3.631E-07	1.186E-07	5.795E-08	3.765E-08	2.739E-08	1.521E-08	7.254E-09	4.254E-09	2.961E-09	2.249E-09
SE	3.061E-07	1.027E-07	5.129E-08	3.334E-08	2.412E-08	1.319E-08	6.100E-09	3.486E-09	2.391E-09	1.800E-09
SSE	3.245E-07	1.070E-07	5.028E-08	3.142E-08	2.217E-08	1.201E-08	5.750E-09	3.536E-09	2.607E-09	2.062E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack

8.000 DAY DECAY, DEPLETED

CORRECTED USING STANDARD OPEN TERRAIN FACTORS
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE IN MILES FROM THE SITE

SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.495E-06	5.155E-07	2.958E-07	1.670E-07	8.398E-08	5.425E-08	3.911E-08	3.004E-08	2.407E-08	1.989E-08	1.682E-08
SSW	1.052E-06	3.756E-07	2.242E-07	1.332E-07	7.228E-08	4.835E-08	3.534E-08	2.725E-08	2.182E-08	1.797E-08	1.514E-08
SW	1.258E-06	4.527E-07	2.733E-07	1.670E-07	9.064E-08	5.901E-08	4.196E-08	3.160E-08	2.480E-08	2.009E-08	1.667E-08
WSW	1.266E-06	4.487E-07	2.600E-07	1.526E-07	7.816E-08	4.913E-08	3.419E-08	2.538E-08	1.972E-08	1.586E-08	1.325E-08
W	1.735E-06	5.743E-07	3.226E-07	1.822E-07	8.814E-08	5.389E-08	3.696E-08	2.723E-08	2.107E-08	1.690E-08	1.394E-08
WNW	2.017E-06	6.464E-07	3.512E-07	1.980E-07	9.781E-08	6.083E-08	4.223E-08	3.139E-08	2.447E-08	1.975E-08	1.637E-08
NW	1.966E-06	6.393E-07	3.364E-07	1.837E-07	8.905E-08	5.515E-08	3.831E-08	2.855E-08	2.232E-08	1.808E-08	1.510E-08
NNW	1.916E-06	6.115E-07	3.206E-07	1.723E-07	8.208E-08	5.098E-08	3.576E-08	2.695E-08	2.131E-08	1.743E-08	1.480E-08
N	2.081E-06	6.882E-07	3.794E-07	2.099E-07	1.037E-07	6.613E-08	4.729E-08	3.614E-08	2.886E-08	2.379E-08	2.021E-08
NNE	4.208E-06	1.393E-06	7.701E-07	4.161E-07	1.955E-07	1.206E-07	8.430E-08	6.342E-08	5.120E-08	4.275E-08	3.601E-08
NE	2.961E-06	1.050E-06	6.141E-07	3.535E-07	1.828E-07	1.186E-07	8.521E-08	6.506E-08	5.180E-08	4.254E-08	3.578E-08

ENE	1.952E-06	6.836E-07	3.953E-07	2.343E-07	1.327E-07	9.230E-08	6.959E-08	5.501E-08	4.497E-08	3.770E-08	3.224E-08
E	1.383E-06	5.096E-07	2.955E-07	1.738E-07	9.762E-08	6.789E-08	5.138E-08	4.083E-08	3.354E-08	2.825E-08	2.427E-08
ESE	1.792E-06	6.158E-07	3.413E-07	1.938E-07	1.041E-07	7.101E-08	5.334E-08	4.230E-08	3.477E-08	2.934E-08	2.528E-08
SE	1.499E-06	5.170E-07	2.874E-07	1.649E-07	9.094E-08	6.288E-08	4.747E-08	3.765E-08	3.090E-08	2.600E-08	2.232E-08
SSE	1.555E-06	5.367E-07	3.059E-07	1.763E-07	9.388E-08	6.263E-08	4.593E-08	3.561E-08	2.870E-08	2.380E-08	2.018E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES FROM THE SITE

SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.450E-08	8.725E-09	6.203E-09	3.995E-09	2.925E-09	2.302E-09	1.898E-09	1.615E-09	1.401E-09	1.236E-09	1.100E-09
SSW	1.299E-08	7.566E-09	5.227E-09	3.209E-09	2.259E-09	1.718E-09	1.373E-09	1.136E-09	9.613E-10	8.305E-10	7.271E-10
SW	1.412E-08	7.805E-09	5.201E-09	3.034E-09	2.056E-09	1.516E-09	1.181E-09	9.538E-10	7.905E-10	6.696E-10	5.761E-10
WSW	1.130E-08	6.202E-09	4.130E-09	2.418E-09	1.648E-09	1.220E-09	9.501E-10	7.608E-10	6.228E-10	5.200E-10	4.410E-10
W	1.175E-08	6.700E-09	4.608E-09	2.844E-09	1.966E-09	1.439E-09	1.097E-09	8.621E-10	6.987E-10	5.798E-10	4.903E-10
WNW	1.387E-08	8.200E-09	5.833E-09	3.826E-09	2.731E-09	2.032E-09	1.549E-09	1.224E-09	9.966E-10	8.307E-10	7.053E-10
NW	1.290E-08	7.611E-09	5.406E-09	3.563E-09	2.660E-09	2.064E-09	1.644E-09	1.334E-09	1.094E-09	9.154E-10	7.793E-10
NNW	1.283E-08	8.071E-09	6.013E-09	4.195E-09	3.115E-09	2.373E-09	1.844E-09	1.465E-09	1.196E-09	9.996E-10	8.503E-10
N	1.751E-08	1.098E-08	8.087E-09	5.494E-09	4.127E-09	3.175E-09	2.501E-09	2.012E-09	1.643E-09	1.371E-09	1.164E-09
NNE	3.096E-08	1.788E-08	1.238E-08	7.661E-09	5.426E-09	4.141E-09	3.316E-09	2.745E-09	2.320E-09	2.001E-09	1.749E-09
NE	3.069E-08	1.787E-08	1.240E-08	7.686E-09	5.453E-09	4.170E-09	3.348E-09	2.780E-09	2.359E-09	2.041E-09	1.791E-09
ENE	2.804E-08	1.712E-08	1.223E-08	7.874E-09	5.732E-09	4.475E-09	3.657E-09	3.085E-09	2.656E-09	2.330E-09	2.070E-09
E	2.120E-08	1.300E-08	9.298E-09	5.974E-09	4.327E-09	3.352E-09	2.714E-09	2.266E-09	1.935E-09	1.683E-09	1.483E-09
ESE	2.214E-08	1.386E-08	1.011E-08	6.709E-09	4.993E-09	3.962E-09	3.277E-09	2.791E-09	2.429E-09	2.150E-09	1.926E-09
SE	1.948E-08	1.202E-08	8.643E-09	5.612E-09	4.109E-09	3.221E-09	2.640E-09	2.232E-09	1.930E-09	1.699E-09	1.513E-09
SSE	1.744E-08	1.072E-08	7.765E-09	5.200E-09	3.969E-09	3.257E-09	2.792E-09	2.448E-09	2.147E-09	1.892E-09	1.675E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack
8.000 DAY DECAY, DEPLETED
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES FROM THE SITE

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.874E-07	8.922E-08	3.952E-08	2.418E-08	1.687E-08	8.888E-09	4.010E-09	2.307E-09	1.614E-09	1.234E-09
SSW	2.174E-07	7.519E-08	3.557E-08	2.190E-08	1.518E-08	7.731E-09	3.235E-09	1.724E-09	1.137E-09	8.310E-10
SW	2.659E-07	9.354E-08	4.236E-08	2.495E-08	1.674E-08	8.051E-09	3.081E-09	1.526E-09	9.565E-10	6.708E-10
WSW	2.542E-07	8.179E-08	3.465E-08	1.987E-08	1.330E-08	6.413E-09	2.456E-09	1.226E-09	7.623E-10	5.212E-10
W	3.161E-07	9.381E-08	3.758E-08	2.124E-08	1.401E-08	6.893E-09	2.846E-09	1.443E-09	8.668E-10	5.819E-10
WNW	3.487E-07	1.036E-07	4.286E-08	2.465E-08	1.645E-08	8.408E-09	3.785E-09	2.025E-09	1.230E-09	8.334E-10
NW	3.359E-07	9.502E-08	3.890E-08	2.248E-08	1.517E-08	7.806E-09	3.571E-09	2.055E-09	1.331E-09	9.180E-10
NNW	3.193E-07	8.831E-08	3.630E-08	2.144E-08	1.485E-08	8.213E-09	4.119E-09	2.359E-09	1.471E-09	1.003E-09
N	3.727E-07	1.106E-07	4.785E-08	2.901E-08	2.027E-08	1.115E-08	5.463E-09	3.159E-09	2.011E-09	1.375E-09
NNE	7.513E-07	2.112E-07	8.562E-08	5.147E-08	3.614E-08	1.834E-08	7.716E-09	4.154E-09	2.746E-09	2.002E-09
NE	5.953E-07	1.922E-07	8.606E-08	5.206E-08	3.590E-08	1.828E-08	7.740E-09	4.183E-09	2.782E-09	2.043E-09
ENE	3.878E-07	1.373E-07	6.981E-08	4.507E-08	3.230E-08	1.738E-08	7.891E-09	4.483E-09	3.085E-09	2.330E-09
E	2.890E-07	1.013E-07	5.156E-08	3.361E-08	2.431E-08	1.318E-08	5.981E-09	3.357E-09	2.268E-09	1.684E-09

ESE	3.367E-07	1.093E-07	5.364E-08	3.485E-08	2.532E-08	1.403E-08	6.702E-09	3.963E-09	2.792E-09	2.149E-09
SE	2.840E-07	9.491E-08	4.765E-08	3.096E-08	2.236E-08	1.218E-08	5.617E-09	3.225E-09	2.233E-09	1.699E-09
SSE	2.996E-07	9.830E-08	4.626E-08	2.881E-08	2.024E-08	1.090E-08	5.223E-09	3.261E-09	2.432E-09	1.887E-09

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack

CORRECTED USING STANDARD OPEN TERRAIN FACTORS

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DISTANCES IN MILES

DIRECTION FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.686E-08	8.051E-09	5.067E-09	2.798E-09	1.135E-09	6.278E-10	3.993E-10	2.765E-10	2.026E-10	1.546E-10	1.216E-10
SSW	1.316E-08	6.443E-09	4.160E-09	2.351E-09	9.760E-10	5.470E-10	3.508E-10	2.442E-10	1.795E-10	1.372E-10	1.080E-10
SW	1.725E-08	8.478E-09	5.696E-09	3.248E-09	1.363E-09	7.667E-10	4.927E-10	3.434E-10	2.525E-10	1.931E-10	1.521E-10
WSW	2.019E-08	1.033E-08	6.498E-09	3.546E-09	1.422E-09	7.750E-10	4.880E-10	3.358E-10	2.451E-10	1.867E-10	1.522E-10
W	2.785E-08	1.366E-08	8.194E-09	4.562E-09	1.782E-09	9.363E-10	5.739E-10	3.876E-10	2.795E-10	2.111E-10	1.652E-10
WNW	2.835E-08	1.480E-08	9.606E-09	5.006E-09	1.911E-09	1.006E-09	6.187E-10	4.194E-10	3.034E-10	2.300E-10	1.805E-10
NW	2.615E-08	1.417E-08	8.852E-09	4.744E-09	1.772E-09	9.294E-10	5.710E-10	3.872E-10	2.805E-10	2.129E-10	1.675E-10
NNW	2.258E-08	1.175E-08	7.219E-09	3.748E-09	1.385E-09	7.254E-10	4.455E-10	3.021E-10	2.189E-10	1.662E-10	1.326E-10
N	2.314E-08	1.122E-08	6.940E-09	3.651E-09	1.387E-09	7.372E-10	4.570E-10	3.115E-10	2.262E-10	1.718E-10	1.350E-10
NNE	5.031E-08	2.298E-08	1.382E-08	7.254E-09	2.776E-09	1.477E-09	9.164E-10	6.246E-10	4.532E-10	3.478E-10	2.728E-10
NE	4.297E-08	2.033E-08	1.279E-08	7.090E-09	2.899E-09	1.607E-09	1.023E-09	7.090E-10	5.196E-10	3.964E-10	3.118E-10
ENE	2.496E-08	1.315E-08	8.603E-09	4.843E-09	1.982E-09	1.107E-09	7.092E-10	4.936E-10	3.629E-10	2.777E-10	2.189E-10
E	2.071E-08	1.147E-08	7.499E-09	4.157E-09	1.658E-09	9.153E-10	5.820E-10	4.034E-10	2.961E-10	2.264E-10	1.786E-10
ESE	2.303E-08	1.263E-08	8.144E-09	4.444E-09	1.741E-09	9.499E-10	5.995E-10	4.137E-10	3.029E-10	2.313E-10	1.824E-10
SE	1.963E-08	1.083E-08	7.004E-09	3.836E-09	1.508E-09	8.253E-10	5.220E-10	3.606E-10	2.642E-10	2.018E-10	1.592E-10
SSE	1.920E-08	1.009E-08	6.506E-09	3.598E-09	1.442E-09	7.957E-10	5.058E-10	3.504E-10	2.570E-10	1.964E-10	1.548E-10

DISTANCES IN MILES

DIRECTION FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	9.806E-11	4.663E-11	2.858E-11	1.510E-11	9.602E-12	6.883E-12	5.292E-12	4.267E-12	3.824E-12	3.584E-12	4.441E-12
SSW	8.711E-11	4.152E-11	2.560E-11	1.337E-11	8.481E-12	6.055E-12	4.632E-12	3.713E-12	3.089E-12	2.615E-12	2.369E-12
SW	1.226E-10	5.914E-11	3.592E-11	1.882E-11	1.185E-11	8.397E-12	6.361E-12	5.037E-12	4.136E-12	3.465E-12	3.046E-12
WSW	1.226E-10	5.785E-11	3.480E-11	1.810E-11	1.148E-11	8.187E-12	7.718E-12	7.168E-12	5.796E-12	4.697E-12	3.813E-12
W	1.329E-10	6.210E-11	3.764E-11	2.490E-11	2.010E-11	1.404E-11	9.906E-12	7.475E-12	5.814E-12	4.646E-12	3.794E-12
WNW	1.457E-10	6.989E-11	4.237E-11	3.565E-11	2.512E-11	1.624E-11	1.193E-11	8.965E-12	6.972E-12	5.577E-12	4.552E-12
NW	1.354E-10	6.496E-11	4.018E-11	2.164E-11	2.339E-11	1.767E-11	1.257E-11	8.770E-12	6.840E-12	5.439E-12	4.442E-12
NNW	1.071E-10	5.107E-11	3.151E-11	2.377E-11	2.411E-11	1.482E-11	1.045E-11	7.888E-12	6.138E-12	4.906E-12	4.002E-12
N	1.090E-10	5.266E-11	3.239E-11	1.737E-11	2.427E-11	2.053E-11	1.351E-11	9.541E-12	7.426E-12	5.936E-12	4.848E-12
NNE	2.197E-10	1.043E-10	6.361E-11	3.345E-11	2.139E-11	1.544E-11	1.194E-11	9.687E-12	8.120E-12	6.958E-12	6.095E-12
NE	2.513E-10	1.183E-10	7.318E-11	3.841E-11	2.434E-11	1.740E-11	1.324E-11	1.059E-11	8.756E-12	7.407E-12	6.401E-12
ENE	1.767E-10	8.391E-11	5.184E-11	2.753E-11	1.755E-11	1.274E-11	9.794E-12	7.956E-12	6.641E-12	5.700E-12	4.981E-12
E	1.443E-10	6.879E-11	4.256E-11	2.277E-11	1.453E-11	1.068E-11	8.220E-12	6.528E-12	5.310E-12	4.401E-12	3.703E-12
ESE	1.474E-10	7.026E-11	4.351E-11	2.334E-11	1.493E-11	1.101E-11	8.497E-12	6.767E-12	5.521E-12	4.572E-12	3.865E-12
SE	1.287E-10	6.135E-11	3.799E-11	2.039E-11	1.303E-11	9.594E-12	7.417E-12	5.989E-12	4.905E-12	4.284E-12	3.776E-12
SSE	1.250E-10	5.954E-11	3.689E-11	1.966E-11	1.264E-11	9.098E-12	7.207E-12	9.109E-12	9.610E-12	7.686E-12	6.242E-12

USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

Fermi COL A (using distances from TB Vent Stack)

Turbine Bldg Stack

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.722E-09	1.279E-09	4.111E-10	2.054E-10	1.227E-10	5.003E-11	1.565E-11	6.972E-12	4.391E-12	3.972E-12
SSW	3.863E-09	1.091E-09	3.605E-10	1.819E-10	1.089E-10	4.457E-11	1.392E-11	6.133E-12	3.738E-12	2.664E-12
SW	5.226E-09	1.517E-09	5.060E-10	2.558E-10	1.533E-10	6.292E-11	1.952E-11	8.504E-12	5.072E-12	3.508E-12
WSW	6.039E-09	1.606E-09	5.037E-10	2.488E-10	1.515E-10	6.200E-11	1.887E-11	8.876E-12	6.802E-12	4.695E-12
W	7.794E-09	2.024E-09	5.960E-10	2.843E-10	1.669E-10	6.697E-11	2.560E-11	1.400E-11	7.537E-12	4.676E-12
WNW	8.717E-09	2.197E-09	6.423E-10	3.086E-10	1.823E-10	7.450E-11	3.246E-11	1.689E-11	9.054E-12	5.611E-12
NW	8.208E-09	2.058E-09	5.930E-10	2.852E-10	1.691E-10	6.960E-11	2.654E-11	1.716E-11	9.122E-12	5.485E-12
NNW	6.683E-09	1.617E-09	4.628E-10	2.226E-10	1.331E-10	5.483E-11	2.564E-11	1.555E-11	7.954E-12	4.936E-12
N	6.429E-09	1.602E-09	4.735E-10	2.299E-10	1.363E-10	5.617E-11	2.378E-11	1.872E-11	9.870E-12	5.975E-12
NNE	1.294E-08	3.194E-09	9.492E-10	4.621E-10	2.754E-10	1.119E-10	3.479E-11	1.563E-11	9.734E-12	6.983E-12
NE	1.193E-08	3.256E-09	1.053E-09	5.268E-10	3.145E-10	1.278E-10	3.988E-11	1.759E-11	1.065E-11	7.434E-12
ENE	7.943E-09	2.229E-09	7.291E-10	3.678E-10	2.207E-10	9.029E-11	2.850E-11	1.284E-11	7.980E-12	5.713E-12
E	6.896E-09	1.883E-09	5.994E-10	3.002E-10	1.801E-10	7.392E-11	2.350E-11	1.072E-11	6.547E-12	4.412E-12
ESE	7.497E-09	1.990E-09	6.186E-10	3.073E-10	1.839E-10	7.552E-11	2.408E-11	1.105E-11	6.787E-12	4.591E-12
SE	6.445E-09	1.722E-09	5.383E-10	2.680E-10	1.605E-10	6.594E-11	2.103E-11	9.641E-12	5.984E-12	4.280E-12
SSE	6.009E-09	1.634E-09	5.210E-10	2.606E-10	1.561E-10	6.402E-11	2.037E-11	9.287E-12	8.756E-12	7.721E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)
ELEVATED	LESS THAN 3.556
MIXED	BETWEEN 3.556 AND 17.780
GROUND LEVEL	ABOVE 17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS	WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS
ELEVATED	LESS THAN 1.332	LESS THAN 2.176
MIXED	BETWEEN 1.332 AND 6.659	BETWEEN 2.176 AND 10.881
GROUND LEVEL	ABOVE 6.659	ABOVE 10.881

1USNRC COMPUTER CODE - XOQDOQ, VERSION 2.0 RUN DATE: 11-23-2009 16:29

0Fermi COL A (using distances from TB Vent Stack)

0Turbine Bldg Stack
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE	DIST. (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.260 DAY DECAY	X/Q (SEC/M3) 8.000 DAY DECAY	D/Q (PER SQ.METER)
+				UNDEPLETED	UNDEPLETED	DEPLETED	
	Site Boundary	S	.76	3.2E-07	3.2E-07	2.9E-07	5.0E-09
	Site Boundary	SSW	.78	2.3E-07	2.3E-07	2.1E-07	3.9E-09
	Site Boundary	SW	.97	1.9E-07	1.9E-07	1.7E-07	3.5E-09
	Site Boundary	WSW	.75	2.8E-07	2.8E-07	2.6E-07	6.5E-09
	Site Boundary	W	.62	4.5E-07	4.4E-07	4.1E-07	1.0E-08
	Site Boundary	WNW	.56	5.7E-07	5.7E-07	5.3E-07	1.3E-08
	Site Boundary	NW	.55	5.7E-07	5.7E-07	5.3E-07	1.3E-08
	Site Boundary	NNW	.55	5.6E-07	5.5E-07	5.1E-07	1.1E-08
	Site Boundary	N	.63	5.2E-07	5.2E-07	4.8E-07	8.6E-09
	Site Boundary	NNE	.91	5.5E-07	5.5E-07	5.0E-07	9.0E-09
	Site Boundary	NE	1.20	2.9E-07	2.8E-07	2.6E-07	4.8E-09
	Site Boundary	SSE	.76	3.3E-07	3.2E-07	3.0E-07	6.4E-09
	Residence	SSE	.97	2.0E-07	2.0E-07	1.8E-07	3.8E-09
	Residence	SSW	.95	1.6E-07	1.6E-07	1.4E-07	2.6E-09
	Residence	SW	1.07	1.6E-07	1.6E-07	1.5E-07	2.8E-09
	Residence	WSW	1.08	1.4E-07	1.4E-07	1.3E-07	3.0E-09
	Residence	W	1.01	1.9E-07	1.9E-07	1.8E-07	4.4E-09

Residence	NW	.66	4.3E-07	4.3E-07	3.9E-07	1.0E-08
Residence	NW	1.04	1.8E-07	1.8E-07	1.7E-07	4.3E-09
Residence	NNW	1.17	1.4E-07	1.4E-07	1.3E-07	2.6E-09
Residence	NNE	1.29	2.9E-07	2.9E-07	2.6E-07	4.0E-09
Residence	NNE	1.22	3.2E-07	3.2E-07	2.8E-07	4.6E-09
Residence	NE	1.28	2.6E-07	2.6E-07	2.3E-07	4.1E-09
Garden	S	1.34	1.1E-07	1.1E-07	1.0E-07	1.5E-09
Garden	WSW	2.09	5.0E-08	5.0E-08	4.6E-08	7.1E-10
Garden	W	1.54	9.3E-08	9.3E-08	8.4E-08	1.7E-09
Garden	NW	.66	4.2E-07	4.2E-07	3.9E-07	1.0E-08
Garden	NNW	1.07	1.7E-07	1.7E-07	1.5E-07	3.2E-09
Garden	NNW	1.44	9.7E-08	9.7E-08	8.8E-08	1.5E-09
Garden	N	2.34	5.8E-08	5.7E-08	5.2E-08	5.2E-10
Garden	NNE	2.12	1.2E-07	1.2E-07	1.1E-07	1.3E-09
Garden	NE	2.16	1.2E-07	1.2E-07	1.1E-07	1.4E-09
Sheep	NNW	4.43	1.7E-08	1.7E-08	1.5E-08	1.4E-10
Sheep	NNE	4.46	4.1E-08	4.1E-08	3.6E-08	2.8E-10
Goat	WNW	2.29	5.4E-08	5.4E-08	4.9E-08	7.5E-10
Goat	NNW	3.06	2.9E-08	2.9E-08	2.6E-08	2.9E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	71.30	REP. WIND HEIGHT	(METERS)	71.3
DIAMETER	(METERS)	1.95	BUILDING HEIGHT	(METERS)	52.0
EXIT VELOCITY	(METERS)	17.78	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	.0
			HEAT EMISSION RATE	(CAL/SEC)	.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	3.556
MIXED	BETWEEN	3.556 AND 17.780
GROUND LEVEL	ABOVE	17.780

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS		WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	1.332	LESS THAN	2.176
MIXED	BETWEEN	1.332 AND 6.659	BETWEEN	2.176 AND 10.881
GROUND LEVEL	ABOVE	6.659	ABOVE	10.881

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00101111000
Fermi COL A (using distances from RW Vent Stack)
    9    7    6   15    5    3    0
   10. 101. 2.26   -8.   0.
    0    0    0    0    0    0    0
    0    0    5    3    5    1   10    6    8    7    5    2    3    0    0    0
    6    3   10   24    3    4    4    8    5    7   10   10   22   17   12    4
   29   35   46   42   42   56   63   59   62   68   58  100   97  133  117   53
   53   63  108  102  106  279  363  243  222  199  137  158  188  221  202  137
   72   44  131  145  141  326  422  320  203  300  174  199  146  208  198  149
   72   48   79  129  181  211  124  123   79  256  200  163  122  127  108  115
   12   14   15   39  116   57    7   10    9   68   79   20   42   33   30   37
   12    7    1    7   37    9    0    1    1   11   18    5    3    5    4    8
    0    0    0    0    2    0    0    0    0    2    1    0    0    0    0    0
    0    0    0    1    0    1    1    0    0    2    0    0    0    0    0    0
    3    2    2    1    0    1    1    4    4    3    5    4   15    9    6    1
   30   23   12   18    7   17   32   14   19   25   28   38   38   45   43   36
   35   23   30   19   18   40   75   61   46   50   57   58   78   70   55   61
   34   20   19   28   25   37   51   39   24   82   58   71   51   43   43   42
   20   19   15   28   35   22   21   12   18   70   84   28   36   25   22   32
    7   12    3   12   17   13    4    2    2   30   43   13   11   14    6    9
    6    1    2    4    7    1    0    0    0   10   25    2    1    2    2    0
    0    0    0    0    0    0    0    0    0    0    4    0    0    0    0    0
    0    0    0    0    0    1    0    0    1    2    1    0    0    0    0    0
    2    5    4    4    1    0    1    0    5    7    4   12   14   10    6   12
   27   24   12    6    5   15   14   15   22   29   37   48   48   57   44   27
   42   30   28   11   20   37   46   39   39   50   51   57   52   48   36   60
   29   23   36   29   19   28   34   32   27   56   77   36   48   39   31   41
   30   21   27   42   28   30   14    6   20   74   77   44   26   27   22   13
   10   22    6   14   18   12    5    7    5   35   48   16   16   20    9    8
    6    0    1   10   10    2    1    1    0    8   45    6    0    3    5    2
    0    0    0    2    1    0    0    0    0    0    6    0    0    0    0    0
    1    0    1    1    1    2    6    2    3    8    7    4    4    3    0    0
   48   29   26   12    6   11   11    8   11   31   36   56   77   71   55   42
  122  169   90   51   47   73   55   60   77   74  186  330  260  216  213  189
  144  180  251  131   93  158  162   93  133  194  391  431  290  256  271  290
  133  131  380  240  179  194  173  103  161  256  483  333  216  180  178  223
  222  133  330  324  240  195  102   92  126  392  585  237  160  152  115  128
   99  105   84  123  163   64   23   18   36  171  346   55   38   77   20   48
   31   34    4   43   79   30    9    2    3   76  125   21    6   11    2   15
    4   10    2    4   26    1    1    2    0    1   28    4    0    0    0    0
    2    0    3    3    4    0    2    1    8    9    4    6    5    3    4    2
   65   45   32   17   20   18   21   31   71   77  128  212  193  193  140   74
  167  225   74   48   54   98   83  114  202  239  464  525  306  352  408  258
  166  159  210  132  131  185  164  197  267  507  340  228  142  139  131  211
   92   60  117  126  123  182  150  142  231  452  158   57   47   58   47   59
   56   39   35   67   91   82   87   94  153  423  113   23   13   29   36   23
   13    6    9   13   55   35   11   14   34  121   42    2    3    6    6    8
    7    2    0    3   26   14    2    0    7   21   10    0    2    1    1    3
    1    0    0    3   10    0    0    2    1    3    3    0    1    2    0    0
    2    1    1    1    0    2    2    3    3    2    3    5    4    3    3    5
   48   32   15   10   12   13   13   40   68   99  134  203  221  265  162   93
  149   66   24   14   18   42   42   72  106  177  221  215  122  212  160  144
   98   35   11   10   32   47   66   93   67  141   26    6    7   14   15   47
   13    9    5   12   20   36   37   57   47   98   14    5    9    2    6    5
    8    3    0    8   16   16   22   32   41   81    9    5    1    6    2    6
    1    0    0    2    8    5    7    7   15   14    2    1    0    1    0    0
    0    0    0    0    8    0    1    3    2    4    0    5    1    0    0    0
    0    0    0    0    0    0    0    0    0    1    0    2    2    0    0    0
    0    0    0    0    0    0    0    1    0    0    1    2    2    0    2    0
   23   14    5    1    1    7    9    7   21   23   49  128  223  333  151   77
   63   12    5    4   10   27   37   21   17   60   49   81   49  184   87   91
   20   10    2    2   10   27   37   31   18   29   11    2    2    3    1   19
    4    0    0    2   10   18   22   24    9   15    5    0    0    1    1    0
    1    0    0    0    8   13   20   18    5   16    7    5    0    0    0    0
    0    0    0    0    2    1    3    5    0    0    1    1    0    0    0    0
    0    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0
    0    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
 101. 0.75  2.5  4.5  6.5  8.5 11.5 14.5 18.5 23.5
 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609 1609
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219 3219
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828 4828
    0    2    4    5    7    8    7    5    4    0    0    0    0    0    0    0
 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437 6437
    0    2    4    5    7    8    7    5    4    4    0    0    0    0    0    0
 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047 8047
    0    2    4    8    7    8    8    7    5    5    0    0    0    0    0    0
8046780467804678046780467804678046780467804678046780467804678046780467804678046780467
   45   37   37   68  151  174  121  159  129   22   22   22    0    7   14   68
   12   11    9    2    2
Site Boundary
    1 1191    2 1218    3 1494    4 1136    5  913    6  863    7  845    8  845
```

```
    9  976   10 1413   11 1961   16 1191
Residence
   16 1538    2 1504    3 1653    4 1676    5 1541    7 1033    7 1640    8 1846
   10 2012   10 1901   11 2089
Garden
    1 2127    4 3300    5 2392    7 1036    8 1638    8 2272    9 3633   10 3359
   11 3509
Sheep
    8 7099   10 7120
Goat
    6 3648    8 4887
Ground Level/Radwaste Bldg
   0.   0.  10.   0. 350.  10.   0.
    0    0    0
Reactor Bldg/Fuel Bldg Stack
17.78  2.452.6248.05   0.52.62   0.
    0    0    0
Turbine Bldg Stack
17.78 1.95 71.3  52.   0. 71.3   0.
    0    0    0
```

```
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:25

 PRINTOUT OF INPUT CARDS
0    1     00101 11100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
     2     Fermi COL A (using distances from RB/FB Vent Stack)
     3         9    7    6   15    5    3    0
     4       10.00 101.00   2.26  -8.00    .00
     5        .000   .000   .000   .000   .000   .000   .000
     6        .000   .000  5.000  3.000  5.000  1.000 10.000  6.000  8.000  7.000  5.000  2.000  3.000   .000   .000   .000
     6       6.000  3.000 10.000 24.000  3.000  4.000  4.000  8.000  5.000  7.000 10.000 10.000 22.000 17.000 12.000  4.000
     6      29.000 35.000 46.000 42.000 42.000 56.000 63.000 59.000 62.000 68.000 58.000100.000 97.000133.000117.000 53.000
     6      53.000 63.000108.000102.000106.000279.000363.000243.000222.000199.000137.000158.000188.000221.000202.000137.000
     6      72.000 44.000131.000145.000141.000326.000422.000320.000203.000300.000174.000199.000146.000208.000198.000149.000
     6      72.000 48.000 79.000129.000181.000211.000124.000123.000 79.000256.000200.000163.000122.000127.000108.000115.000
     6      12.000 14.000 15.000 39.000116.000 57.000  7.000 10.000  9.000 68.000 79.000 20.000 42.000 33.000 30.000 37.000
     6      12.000  7.000  1.000  7.000 37.000  9.000   .000  1.000  1.000 11.000 18.000  5.000  3.000  5.000  4.000  8.000
     6        .000   .000   .000   .000  2.000   .000   .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000
     6        .000   .000   .000  1.000   .000  1.000  1.000   .000   .000  2.000   .000   .000   .000   .000   .000   .000
     6       3.000  2.000  2.000  1.000   .000  1.000  1.000  4.000  4.000  3.000  5.000  4.000 15.000  9.000  6.000  1.000
     6      30.000 23.000 12.000 18.000  7.000 17.000 32.000 14.000 19.000 25.000 28.000 38.000 38.000 45.000 43.000 36.000
     6      35.000 23.000 30.000 19.000 18.000 40.000 75.000 61.000 46.000 50.000 57.000 58.000 78.000 70.000 55.000 61.000
     6      34.000 20.000 19.000 28.000 25.000 37.000 51.000 39.000 24.000 82.000 58.000 71.000 51.000 43.000 43.000 42.000
     6      20.000 19.000 15.000 28.000 35.000 22.000 21.000 12.000 18.000 70.000 84.000 28.000 36.000 25.000 22.000 32.000
     6       7.000 12.000  3.000 12.000 17.000 13.000  4.000  2.000  2.000 30.000 43.000 13.000 11.000 14.000  6.000  9.000
     6       6.000  1.000  2.000  4.000  7.000  1.000   .000   .000   .000 10.000 25.000  2.000  1.000  2.000  2.000   .000
     6        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000  4.000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  1.000   .000   .000   .000   .000   .000
     6       2.000  5.000  4.000  4.000  1.000   .000  1.000   .000  5.000  7.000  4.000 12.000 14.000 10.000  6.000 12.000
     6      27.000 24.000 12.000  6.000  5.000 15.000 14.000 15.000 22.000 29.000 37.000 48.000 48.000 57.000 44.000 27.000
     6      42.000 30.000 28.000 11.000 20.000 37.000 46.000 39.000 39.000 50.000 51.000 57.000 52.000 48.000 36.000 60.000
     6      29.000 23.000 36.000 29.000 19.000 28.000 34.000 32.000 27.000 56.000 77.000 36.000 48.000 39.000 31.000 41.000
     6      30.000 21.000 27.000 42.000 28.000 30.000 14.000  6.000 20.000 74.000 77.000 44.000 26.000 27.000 22.000 13.000
     6      10.000 22.000  6.000 14.000 18.000 12.000  5.000  7.000  5.000 35.000 48.000 16.000 16.000 20.000  9.000  8.000
     6       6.000   .000  1.000 10.000 10.000  2.000  1.000  1.000   .000  8.000 45.000  6.000   .000  3.000  5.000  2.000
     6        .000   .000   .000  2.000  1.000   .000   .000   .000   .000   .000  6.000   .000   .000   .000   .000   .000
     6       1.000   .000  1.000  1.000  1.000  2.000  6.000  2.000  3.000  8.000  7.000  4.000  4.000  3.000   .000   .000
     6      48.000 29.000 26.000 12.000  6.000 11.000 11.000  8.000 11.000 31.000 36.000 56.000 77.000 71.000 55.000 42.000
     6     122.000169.000 90.000 51.000 47.000 73.000 55.000 60.000 77.000 74.000186.000330.000260.000216.000213.000189.000
     6     144.000180.000251.000131.000 93.000158.000162.000 93.000133.000194.000391.000431.000290.000256.000271.000290.000
     6     133.000131.000380.000240.000179.000194.000173.000103.000161.000256.000483.000333.000216.000180.000178.000223.000
     6     222.000133.000330.000324.000240.000195.000102.000 92.000126.000392.000585.000237.000160.000152.000115.000128.000
     6      99.000105.000 84.000123.000163.000 64.000 23.000 18.000 36.000171.000346.000 55.000 38.000 77.000 20.000 48.000
     6      31.000 34.000  4.000 43.000 79.000 30.000  9.000  2.000  3.000 76.000125.000 21.000  6.000 11.000  2.000 15.000
     6       4.000 10.000  2.000  4.000 26.000  1.000  1.000  2.000   .000  1.000 28.000  4.000   .000   .000   .000   .000
     6       2.000   .000  3.000  3.000  4.000   .000  2.000  1.000  8.000  9.000  4.000  6.000  5.000  3.000  4.000  2.000
     6      65.000 45.000 32.000 17.000 20.000 18.000 21.000 31.000 71.000 77.000128.000212.000193.000193.000140.000 74.000
     6     167.000225.000 74.000 48.000 54.000 98.000 83.000114.000202.000239.000464.000525.000306.000352.000408.000258.000
     6     166.000159.000210.000132.000131.000185.000164.000197.000267.000507.000340.000228.000142.000139.000131.000211.000
     6      92.000 60.000117.000126.000123.000182.000150.000142.000231.000452.000158.000 57.000 47.000 58.000 47.000 59.000
     6      56.000 39.000 35.000 67.000 91.000 82.000 87.000 94.000153.000423.000113.000 23.000 13.000 29.000 36.000 23.000
     6      13.000  6.000  9.000 13.000 55.000 35.000 11.000 14.000 34.000121.000 42.000  2.000  3.000  6.000  6.000  8.000
     6       7.000  2.000   .000  3.000 26.000 14.000  2.000   .000  7.000 21.000 10.000   .000  2.000  1.000  1.000  3.000
     6       1.000   .000   .000  3.000 10.000   .000   .000  2.000  1.000  3.000  3.000   .000  1.000  2.000   .000   .000
     6       2.000  1.000  1.000  1.000   .000  2.000  2.000  3.000  3.000  2.000  3.000  5.000  4.000  3.000  3.000  5.000
     6      48.000 32.000 15.000 10.000 12.000 13.000 13.000 40.000 68.000 99.000134.000203.000221.000265.000162.000 93.000
     6     149.000 66.000 24.000 14.000 18.000 42.000 42.000 72.000106.000177.000221.000215.000122.000212.000160.000144.000
     6      98.000 35.000 11.000 10.000 32.000 47.000 66.000 93.000 67.000141.000 26.000  6.000  7.000 14.000 15.000 47.000
     6      13.000  9.000  5.000 12.000 20.000 36.000 37.000 57.000 47.000 98.000 14.000  5.000  9.000  2.000  6.000  5.000
     6       8.000  3.000   .000  8.000 16.000 16.000 22.000 32.000 41.000 81.000  9.000  5.000  1.000  6.000  2.000  6.000
     6       1.000   .000   .000  2.000  8.000  5.000  7.000  7.000 15.000 14.000  2.000  1.000   .000  1.000   .000   .000
     6        .000   .000   .000   .000  8.000   .000  1.000  3.000  2.000  4.000   .000  5.000  1.000   .000   .000   .000
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     6        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000  2.000  2.000   .000   .000   .000
     6        .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000  1.000  2.000  2.000   .000  2.000   .000
     6      23.000 14.000  5.000  1.000  1.000  7.000  9.000  7.000 21.000 23.000 49.000128.000223.000333.000151.000 77.000
     6      63.000 12.000  5.000  4.000 10.000 27.000 37.000 21.000 17.000 60.000 49.000 81.000 49.000184.000 87.000 91.000
     6      20.000 10.000  2.000  2.000 10.000 27.000 37.000 31.000 18.000 29.000 11.000  2.000  2.000  3.000  1.000 19.000
     6       4.000   .000   .000  2.000 10.000 18.000 22.000 24.000  9.000 15.000  5.000   .000   .000  1.000  1.000   .000
     6       1.000   .000   .000   .000  8.000 13.000 20.000 18.000  5.000 16.000  7.000  5.000   .000   .000   .000   .000
     6        .000   .000   .000   .000  2.000  1.000  3.000  5.000   .000   .000  1.000  1.000   .000   .000   .000   .000
     6        .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     6        .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
     7        101.   .750  2.500  4.500  6.500  8.500 11.500 14.500 18.500 23.500   .000   .000   .000   .000   .000
 VRDIST,VRCR NOT INPUTTED.
    10       1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.  1609.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.  3219.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.  4828.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     0.     0.     0.     0.     0.     0.     0.
    10       6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.  6437.
    11          0.     2.     4.     5.     7.     8.     7.     5.     4.     4.     0.     0.     0.     0.     0.     0.
    10       8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.  8047.
    11          0.     2.     4.     8.     7.     8.     8.     7.     5.     5.     0.     0.     0.     0.     0.     0.
    10      80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467. 80467.
    11         45.    37.    37.    68.   151.   174.   121.   159.   129.    22.    22.    22.     0.     7.    14.    68.
    12         12    11     9     2     2
    13      Site Boundary
    14        1 1109.0  2 1134.0  3 1413.0  4 1264.0  5  911.0  6  924.0  7  903.0  8  903.0

  9 1042.0 10 1507.0 11 2064.0 16 1109.0
    13      Residence
    14       16 1456.0  2 1420.0  3 1572.0  4 1804.0  5 1539.0  7 1091.0  7 1698.0  8 1904.0

 10 2106.0 10 1995.0 11 2192.0
    13      Garden
    14        1 2045.0  4 3428.0  5 2390.0  7 1094.0  8 1741.0  8 2339.0  9 3699.0 10 3453.0

 11 3612.0
    13      Sheep
    14        8 7157.0 10 7214.0
    13      Goat
    14        6 3709.0  8 4945.0
    15      Ground Level/Radwaste Bldg
    16         .000   .000   10.0     .0  350.0   10.0   .00
    17          0     0     0
    15      Reactor Bldg/Fuel Bldg Stack
    16       17.780  2.400   52.6   48.0     .0   52.6   .00
    17          0     0     0
    15      Turbine Bldg Stack
    16       17.780  1.950   71.3   52.0     .0   71.3   .00
    17          0     0     0
1USNRC COMPUTER CODE - XOQDOQ,  VERSION 2.0          RUN DATE: 11-23-2009    16:25

     Fermi COL A (using distances from RB/FB Vent Stack)

0JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION          ATMOSPHERIC STABILITY CLASS A
0UMAX (M/S)       N    NNE     NE    ENE      E    ESE     SE    SSE      S    SSW     SW    WSW      W    WNW     NW    NNW  TOTAL
   .34         .000   .000   .010   .006   .010   .002   .020   .012   .016   .014   .010   .004   .006   .000   .000   .000   .110
  1.12         .012   .006   .020   .048   .006   .008   .008   .016   .010   .014   .020   .020   .044   .034   .024   .008   .298
  2.01         .058   .070   .092   .084   .084   .112   .126   .118   .124   .136   .116   .200   .194   .266   .234   .106  2.117
  2.91         .106   .126   .216   .204   .212   .557   .725   .485   .443   .397   .274   .316   .375   .441   .403   .274  5.554
  3.80         .144   .088   .262   .290   .282   .651   .843   .639   .405   .599   .347   .397   .292   .415   .395   .298  6.347
```