TABLE 2.3-1

PERCENTAGE OF DAYS WITH VARIOUS HYDROMETERS
DOVER DELAWARE AIR FORCE BASE
1942-1965

Month	Fog	Snow and/or Sleet	Hail	Thunderstorms
Jan	43.7	4.1	0.4	0.6
Feb	45.0	3.4	0.2	0.9
Mar	48.4	2.7	-	3.7
Apr	44.4	0.3	0.2	8.9
May	49.0		0.9	16.6
Jun	55.3		0.4	17.1
Jul	54.3		0.2	19.6
Aug	66.3		-	17.4
Sept	59.0		-	6.8
Oct	53.8		0.2	3.0
Nov	47.6	0.6	0.2	1.2
Dec	44.5	2.5	0.2	0.5
Annual	51.2	1.2	0.3	8.2

TABLE 2.3-2

SNOWFALL
(inches)

PHILADELPHIA INTERNATIONAL AIRPORT

Month	Mean	Monthly Maximum
Jan	5.7	19.7
Feb	6.1	18.4
Mar	4.1	13.4
Apr	0.3	4.3
May	T	T
Jun		
Jul		
Aug		
Sept		
Oct	T	T
Nov	0.8	8.8
Dec	4.6	18.8
Annual	21.6	
Length of Record (yr)	28	

(T = Trace of precipitation)

TABLE 2.3-3

SNOWFALL
(inches)

TRENTON AIRPORT

Month	Mean	Monthly Maximum	24-Hour Maximum
Jan	5.8	16.1	10.1
Feb	6.7	23.1	13.0
Mar	4.4	21.5	14.3
Apr	0.4	4.2	4.2
May	T	T	T
Jun			
Jul			
Aug			
Sept			
Oct	0.1	1.6	1.6
Nov	1.0	13.0	7.7
Dec	4.9	21.5	16.6
Annual	23.3		

Length of Record (yr) 34

(T = Trace of precipitation)

TABLE 2.3-4

DISTRIBUTION OF PEAK WINDS

PHILADELPHIA INTERNATIONAL AIRPORT
(25-year record)

Month	Fastest Mile Speed (mph)	Fastest Mile Direction
Jan	61	NE
Feb	59	NW
Mar	56	NW
Apr	59	SW
May	56	SW
June	73	W
July	67	E
Sept	49	NE
Oct	66	SW
Nov	60	SW
Dec	47	NW

Fastest Mile Observed in Area: 88 mph, north, July 1931

Estimated Peak Hourly Value: 70 mph

TABLE 2.3-5

DISTRIBUTION OF HOURLY TEMPERATURES
(percent)
Temperature Classes
(°F)

Month	< -20	-20 to -10	-10 to 0	0 to +10	+10 to +20	+20 to +30	+30 to +40	+40 to +50	+50 to +60	+60 to +70	+70 to +80	+80 to +90	+90 to +100
Jan				6	19	44	25	6	<1				
Feb					6	31	42	17	4				
Mar						9	52	35	4	<1			
Apr							9	35	38	15	3	<1	
May								8	36	34	14	6	2
*Jun									9	48	36	7	<1
*Jul									1	28	54	16	1
*Aug									<1	18	54	24	
*Sep								2	15	30	43	8	2
*Oct						<1	6	19	33	34	8	<1	
*Nov					<1	5	20	42	29	4			
Dec					1	25	59	14	1				
Annual					<1	1	10	18	15	14	17	18	5

*2 months of data

TABLE 2.3-6

PRECIPITATION

(in water)

Month	1969	1970	Range of Maximum Hourly Rate
Jan		0.65	0.01 to 0.10
Feb		1.70	0.11 to 0.20
Mar		3.03	0.21 to 0.30
Apr		4.54	0.51 to 0.60
May		1.39	0.21 to 0.30
Jun	1.87	3.89	0.51 to 0.60
Jul	7.18	2.82	1.00 Plus
Aug	3.75	1.29	0.71 to 0.80
Sept	2.02	1.47	0.41 to 0.50
Oct	2.92	2.13	0.61 to 0.70
Nov	1.64	5.46	0.51 to 0.60
Dec	6.92		0.51 to 0.60

TABLE 2.3-7

PERCENTAGE OF HOURS WITH FOG

Month \ Hour	00-02	03-05	06-08	09-11	12-14	15-17	18-20	21-23	Mean
Jan	19.8	22.3	23.8	19.2	13.5	13.8	15.7	17.3	18.2
Feb	21.4	23.3	25.1	18.0	14.2	13.9	16.5	18.2	18.8
Mar	20.3	23.3	24.9	15.8	12.2	12.2	14.9	17.4	17.6
Apr	18.4	24.2	23.2	12.8	8.8	10.1	12.3	14.18	15.6
May	22.7	27.9	22.2	10.1	6.0	5.4	8.6	14.7	14.7
Jun	21.4	37.2	22.9	7.9	4.6	4.0	6.5	11.0	14.4
Jul	22.7	35.8	23.8	5.1	3.6	3.1	4.8	11.7	13.8
Aug	27.6	42.5	31.8	6.8	3.7	3.1	6.3	14.2	17.0
Sept	25.9	37.6	33.9	9.4	5.0	4.8	8.6	16.2	17.7
Oct	23.6	33.5	35.0	11.2	6.6	6.5	9.6	15.0	17.6
Nov	19.4	22.9	27.6	14.9	8.0	8.6	12.3	15.8	16.2
Dec	20.4	21.4	25.5	19.9	14.7	14.9	17.1	18.0	19.0

TABLE 2.3-8

PERCENTAGE FREQUENCY
OF
TURBULENCE CLASSES

Salem and Delaware City

Month	Turbulence Class I		II		III		IV	
Jan	6	(2)	62	(65)	13	(2)	19	(31)
Feb	4	(3)	57	(64)	16	(5)	23	(28)
Mar	7	(3)	59	(66)	12	(6)	22	(25)
Apr	6	(2)	60	(72)	15	(9)	19	(17)
May	12	(11)	59	(63)	6	(1)	23	(25)
*Jun	13	(12)	57	(58)	10	(1)	20	(29)
*Jul	12	(4)	58	(64)	10	(0)	20	(32)
*Aug	12	(3)	53	(65)	10	(0)	25	(32)
*Sep	14	(4)	50	(62)	12	(7)	24	(27)
*Oct	8	(6)	52	(62)	14	(5)	26	(27)
*Nov	6	(7)	56	(64)	13	(15)	25	(14)
Dec	4	(8)	72	(51)	12	(12)	12	(29)
Annual	8	(6)	58	(62)	12	(5)	22	(27)

*2 months of data

( ) data for Delaware City

TABLE 2.3-9

PERCENTAGE FREQUENCY
OF
LAPSE RATES

Lapse Rate Group ($^{t}300 - {}^{t}33°F$)

Month	≤ -1.7	-1.6 to -0.5	-0.4 to +0.5	+0.6 to +1.5	-1.6 to +2.5	+2.6 to +3.5	+3.6 to +4.5	≥ +4.6
Jan	18	46	11	8	5	5	2	5
Feb	18	37	14	10	6	6	3	6
Mar	20	47	14	6	4	3	2	4
Apr	19	45	12	7	5	6	0	6
May	30	27	10	8	6	7	5	7
*Jun	32	40	12	6	4	3	1	2
*Jul	25	45	13	7	5	3	1	1
*Aug	30	32	14	8	9	4	2	1
*Sep	24	32	18	9	7	5	3	2
*Oct	19	33	20	10	7	4	2	5
*Nov	13	43	20	8	6	3	3	4
Dec	18	57	15	5	3	1	<1	1
Annual	22	40	14	8	6	4	2	4

*2 months of data

TABLE 2.3-10

RELATION BETWEEN LAPSE RATES
AND
TURBULENCE CLASSES
(percent)

Turbulence Class	Temperature Difference, T300-T33 Ft (°F)							
	≤-1.7	-1.6 to -0.5	-0.4 to -0.5	0.6 to 1.5	1.6 to 2.5	2.6 to 3.5	3.6 to 4.5	≥4.6
I	5.6	3.2	0.5	0.1	0.1	0.1	0.1	0.1
II	15.4	26.4	7.3	3.1	1.6	0.9	0.4	0.6
III	0.7	5.9	2.8	1.0	0.6	0.4	0.1	0.2
IV	1.0	3.7	4.5	3.8	3.6	2.7	1.5	2.4

TABLE 2.3-11

AVERAGE HORIZONTAL RANGE

(Degrees)

Month	I	II	III	IV	All
Jan	60	30	20	<10	25
Feb	60	30	20	<10	30
Mar	70	30	20	<10	25
Apr	60	30	20	<10	30
May	70	25	20	<10	25
*Jun	55	25	20	10	25
*Jul	65	25	15	10	20
*Aug	65	20	20	10	20
*Sept	60	25	20	10	25
*Oct	60	30	20	<10	25
*Nov	55	30	20	<10	30
Dec	50	30	20	<10	30
Annual	60	30	20	<10	
sigma	12	6	3-4	< 2	

*2 months of data

TABLE 2.3-12

AVERAGE HORIZONTAL RANGE (DEGREE) FOR
WIND DIRECTIONS BETWEEN 130 AND 160 DEGREES

Turbulence Class

Month	I	II	III	IV	All
Jan	90	40	20	<10	10
Feb	80	30	20	<10	10
Mar	60	30	30	<10	10
Apr	50	40	20	<10	40
May	70	30	20	<10	30
*Jun	70	30	20	10	30
*Jul	60	30	20	10	20
*Aug	70	30	30	<10	30
*Sept	70	30	30	<10	30
Oct	60	30	20	<10	20
Nov	60	30	30	<10	30
Dec	60	30	30	-	30
Annual	70	30	20-30	10	

*2 months of data

TABLE 2.3-13

PERCENTAGE FREQUENCY OF WIND SPEED CLASSES

33ft Wind Speed

Turbulence Class	Calm	2-3	4-7	8-12	13-18	19+	All
I	0.6	2.5	4.4	1.7	0.3	0.0	9.5
II	0.7	4.1	20.9	20.0	8.6	1.8	56.1
III	0.0	0.3	2.6	5.3	2.6	0.7	11.4
IV	1.4	4.2	11.3	5.0	0.9	0.1	22.9
All	2.8	11.1	39.2	32.0	12.3	2.6	100.0

300-ft Wind Speed (mph)

I	0.7	1.9	4.1	2.1	0.6	0.2	9.6
II	0.2	1.1	7.2	18.0	18.6	11.4	56.5
III	0.0	0.0	0.1	0.9	4.8	6.0	11.8
IV	0.4	1.0	3.8	7.1	6.8	3.1	22.2
All	1.3	4.0	15.2	28.1	30.8	20.8	100.0

TABLE 2.3-14

MEAN ANNUAL WIND SPEEDS
AT
VARIOUS LEVELS
(mph)

Turbulence Class	33 ft	300 ft
I	5.0	6.0
II	8.0	13.0
III	10.0	19.0
IV	5.0	12.0
All Hours	7.0	13.0

TABLE 2.3-15
WIND DATA RECOVERY
JUNE 1969 - MAY 1970
(percent)

Month	33-ft Level	300-ft Level
Jun 1969	85	85
Jul	67	67
Aug	92	85
Sep	64	65
Oct	96	97
Nov	86	96
Dec	93	94
Jan 1970	89	99
Feb	86	86
Mar	78	78
Apr	90	23
May	98	84
Annual	86	81

TABLE 2.3-16

METEOROLOGICAL INSTRUMENTATION

Height Above Tower Base (feet)	Sensed Parameter	Recorded Parameter
300	Wind Speed	Wind Speed
	Wind Direction	Wind Direction
	Temperature (a)	Temperature Difference

TABLE 2.3-16 (Cont.)

Height Above Tower Base (feet)	Sensed Parameter	Recorded Parameter
150	Wind Speed	Same
	Wind Direction	As
	Temperature (b)	Above
33	Wind Speed	Same
	Wind Direction	As
		Above
	Temperature Differential $T_{300} - T_{33}$(a) $T_{150} - T_{33}$(b)	
	Dew Point	Dew Point
	Temperature Ambient	Temperature

TABLE 2.3-16 (Cont.)

Height Above Tower Base (feet)	Sensed Parameter	Recorded Parameter
6	Barometric Pressure	Barometric Pressure
3	Rainfall	Rainfall

(a) Temperature taken as part of Temperature Differential Measurement $T_{300} - T_{33}$

(b) Temperature taken as part of Temperature Differential Measurement $T_{150} - T_{33}$

TABLE 2.3-16A

THIS TABLE HAS BEEN DELETED

TABLE 2.3-17

VENT RELEASE - EXIT VELOCITY OF 7.2 M/SECONDS

UNDEPLETED X/Q AT GROUND LEVEL APPLICABLE TO LONG TERM (ROUTINE) GASEOUS RELEASES

(SECONDS/M^3)

SECTOR ANNUAL-X/Q AT GROUND LEVEL

DISTANCE MILES	SECTOR BEARING (DEGREES) 22.5*	45.0	67.5	90.0	112.5	135.0	157.5	180.0
.25	1.492E-06	1.583E-06	1.277E-06	2.114E-06	1.837E-06	2.599E-06	1.811E-06	1.807E-06
.50	8.364E-07	9.285E-07	8.418E-07	1.221E-06	9.332E-07	1.282E-06	8.977E-07	1.028E-06
.75	5.310E-07	6.006E-07	5.664E-07	7.889E-07	5.747E-07	7.853E-07	5.499E-07	6.636E-07
1.00	3.633E-07	4.145E-07	3.976E-07	5.445E-07	3.880E-07	5.293E-07	3.705E-07	4.578E-07
1.10	3.176E-07	3.631E-07	3.498E-07	4.771E-07	3.380E-07	4.610E-07	3.226E-07	4.011E-07
1.20	2.800E-07	3.207E-07	3.100E-07	4.214E-07	2.972E-07	4.052E-07	2.835E-07	3.542E-07
1.30	2.487E-07	2.853E-07	2.766E-07	3.749E-07	2.634E-07	3.591E-07	2.512E-07	3.151E-07
1.40	2.225E-07	2.555E-07	2.483E-07	3.358E-07	2.351E-07	3.205E-07	2.242E-07	2.822E-07
1.50	2.002E-07	2.302E-07	2.242E-07	3.025E-07	2.112E-07	2.880E-07	2.014E-07	2.543E-07
1.60	1.812E-07	2.085E-07	2.034E-07	2.740E-07	1.909E-07	2.602E-07	1.819E-07	2.303E-07
1.70	1.648E-07	1.898E-07	1.855E-07	2.495E-07	1.738E-07	2.364E-07	1.652E-07	2.097E-07
1.80	1.506E-07	1.736E-07	1.698E-07	2.281E-07	1.583E-07	2.157E-07	1.508E-07	1.917E-07
1.90	1.382E-07	1.594E-07	1.561E-07	2.095E-07	1.451E-07	1.978E-07	1.382E-07	1.760E-07
2.00	1.273E-07	1.469E-07	1.441E-07	1.931E-07	1.335E-07	1.820E-07	1.272E-07	1.622E-07
2.10	1.177E-07	1.359E-07	1.334E-07	1.786E-07	1.233E-07	1.681E-07	1.174E-07	1.500E-07
2.20	1.092E-07	1.261E-07	1.239E-07	1.657E-07	1.143E-07	1.558E-07	1.088E-07	1.392E-07
2.30	1.015E-07	1.173E-07	1.154E-07	1.542E-07	1.063E-07	1.448E-07	1.012E-07	1.296E-07
2.40	9.473E-08	1.095E-07	1.077E-07	1.439E-07	9.905E-08	1.350E-07	9.429E-08	1.209E-07
2.50	8.859E-08	1.024E-07	1.009E-07	1.347E-07	9.258E-08	1.262E-07	8.812E-08	1.131E-07
2.60	8.305E-08	9.607E-08	9.464E-08	1.264E-07	8.674E-08	1.182E-07	8.254E-08	1.061E-07
2.70	7.804E-08	9.030E-08	8.901E-08	1.187E-07	8.146E-08	1.110E-07	7.752E-08	9.969E-08
2.80	7.348E-08	8.505E-08	8.388E-08	1.118E-07	7.666E-08	1.045E-07	7.295E-08	9.389E-08
2.90	6.932E-08	8.026E-08	7.919E-08	1.055E-07	7.229E-08	9.852E-08	6.879E-08	8.859E-08
3.00	6.552E-08	7.588E-08	7.490E-08	9.974E-08	6.830E-08	9.308E-08	6.498E-08	8.375E-08
3.10	6.203E-08	7.186E-08	7.097E-08	9.445E-08	6.464E-08	8.809E-08	6.149E-08	7.931E-08
3.20	5.883E-08	6.816E-08	6.735E-08	8.960E-08	6.127E-08	8.351E-08	5.829E-08	7.523E-08
3.30	5.588E-08	6.475E-08	6.401E-08	8.512E-08	5.818E-08	7.928E-08	5.534E-08	7.147E-08
3.40	5.315E-08	6.161E-08	6.092E-08	8.098E-08	5.532E-08	7.539E-08	5.262E-08	6.799E-08
3.50	5.063E-08	5.869E-08	5.806E-08	7.715E-08	5.267E-08	7.178E-08	5.010E-08	6.477E-08
3.60	4.829E-08	5.599E-08	5.540E-08	7.359E-08	5.022E-08	6.844E-08	4.776E-08	6.179E-08

* Compass Direction

TABLE 2.3-18

VENT RELEASE - EXIT VELOCITY OF 7.2 M/SECONDS

UNDEPLETED X/Q AT GROUND LEVEL APPLICABLE TO LONG TERM (ROUTINE) GASEOUS RELEASES

(SECONDS/M^3)

SECTOR ANNUAL X/Q AT GROUND LEVEL

DISTANCE MILES	SECTOR BEARING(DEGREES) 202.5	225.0	247.5	270.0	292.5	315.0	337.5	360.0
.25	1.113E-06	1.196E-06	8.330E-07	1.003E-06	5.579E-07	1.014E-06	1.619E-06	2.300E-06
.50	7.889E-07	7.386E-07	5.207E-07	6.487E-07	4.403E-07	7.496E-07	1.053E-06	1.277E-06
.75	5.407E-07	4.879E-07	3.452E-07	4.342E-07	3.105E-07	5.194E-07	7.043E-07	8.125E-07
1.00	3.824E-07	3.401E-07	2.408E-07	3.042E-07	2.222E-07	3.690E-07	4.951E-07	5.568E-07
1.10	3.370E-07	2.987E-07	2.115E-07	2.676E-07	1.965E-07	3.257E-07	4.356E-07	4.870E-07
1.20	2.991E-07	2.644E-07	1.872E-07	2.371E-07	1.748E-07	2.894E-07	3.841E-07	4.295E-07
1.30	2.672E-07	2.356E-07	1.668E-07	2.115E-07	1.565E-07	2.587E-07	3.425E-07	3.817E-07
1.40	2.401E-07	2.113E-07	1.496E-07	1.898E-07	1.409E-07	2.327E-07	3.074E-07	3.415E-07
1.50	2.170E-07	1.906E-07	1.350E-07	1.714E-07	1.275E-07	2.103E-07	2.774E-07	3.074E-07
1.60	1.970E-07	1.729E-07	1.224E-07	1.555E-07	1.159E-07	1.911E-07	2.517E-07	2.783E-07
1.70	1.797E-07	1.575E-07	1.115E-07	1.417E-07	1.058E-07	1.744E-07	2.294E-07	2.531E-07
1.80	1.647E-07	1.442E-07	1.021E-07	1.298E-07	9.707E-08	1.599E-07	2.100E-07	2.314E-07
1.90	1.515E-07	1.325E-07	9.377E-08	1.193E-07	8.937E-08	1.471E-07	1.931E-07	2.125E-07
2.00	1.398E-07	1.222E-07	8.648E-08	1.101E-07	8.256E-08	1.359E-07	1.781E-07	1.956E-07
2.10	1.295E-07	1.131E-07	8.003E-08	1.019E-07	7.652E-08	1.259E-07	1.649E-07	1.809E-07
2.20	1.203E-07	1.050E-07	7.430E-08	9.464E-08	7.114E-08	1.170E-07	1.531E-07	1.678E-07
2.30	1.121E-07	9.778E-08	6.917E-08	8.815E-08	6.632E-08	1.090E-07	1.426E-07	1.561E-07
2.40	1.047E-07	9.129E-08	6.458E-08	8.232E-08	6.199E-08	1.019E-07	1.332E-07	1.456E-07
2.50	9.804E-08	8.545E-08	6.044E-08	7.707E-08	5.808E-08	9.542E-08	1.247E-07	1.362E-07
2.60	9.200E-08	8.017E-08	5.670E-08	7.232E-08	5.454E-08	8.959E-08	1.170E-07	1.277E-07
2.70	8.658E-08	7.538E-08	5.331E-08	6.801E-08	5.133E-08	8.429E-08	1.100E-07	1.200E-07
2.80	8.161E-08	7.103E-08	5.022E-08	6.409E-08	4.840E-08	7.947E-08	1.036E-07	1.130E-07
2.90	7.707E-08	6.705E-08	4.740E-08	6.052E-08	4.573E-08	7.506E-08	9.785E-08	1.064E-07
3.00	7.291E-08	6.341E-08	4.483E-08	5.724E-08	4.328E-08	7.102E-08	9.255E-08	1.008E-07
3.10	6.909E-08	6.007E-08	4.246E-08	5.423E-08	4.102E-08	6.732E-08	8.768E-08	9.541E-08
3.20	6.558E-08	5.700E-08	4.029E-08	5.146E-08	3.895E-08	6.390E-08	8.320E-08	9.044E-08
3.30	6.233E-08	5.416E-08	3.828E-08	4.891E-08	3.703E-08	6.075E-08	7.907E-08	8.595E-08
3.40	5.934E-08	5.155E-08	3.643E-08	4.655E-08	3.526E-08	5.784E-08	7.526E-08	8.176E-08
3.50	5.656E-08	4.912E-08	3.471E-08	4.437E-08	3.362E-08	5.514E-08	7.172E-08	7.788E-08
3.60	5.398E-08	4.687E-08	3.312E-08	4.234E-08	3.210E-08	5.263E-08	6.844E-08	7.428E-08

TABLE 2.3-19

VENT RELEASE - EXIT VELOCITY OF 7.2 M/SECONDS

UNDEPLETED X/Q AT GROUND LEVEL APPLICABLE TO LONG TERM (ROUTINE) GASEOUS RELEASES

(SECONDS/M^3)

SECTOR ANNUAL X/Q AT GROUND-LEVEL

DISTANCE MILES	SECTOR BEARING (DEGREES) 22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
3.70	4.511E-08	5.347E-08	5.293E-08	7.029E-08	4.794E-08	6.534E-08	4.560E-08	9.901E-08
3.80	4.409E-08	5.113E-08	5.063E-08	6.721E-08	4.582E-08	6.245E-08	4.358E-08	5.643E-08
3.90	4.220E-08	4.895E-08	4.844E-08	6.434E-08	4.385E-08	5.975E-08	4.170E-08	5.402E-08
4.00	4.044E-08	4.691E-08	4.640E-08	4.166E-08	4.200E-08	5.724E-08	3.994E-08	5.176E-08
4.10	3.879E-08	4.500E-08	4.450E-08	5.915E-08	4.028E-08	5.489E-08	3.830E-08	4.964E-08
4.20	3.724E-08	4.322E-08	4.248E-08	5.680E-08	3.866E-08	5.268E-08	3.676E-08	4.764E-08
4.30	3.579E-08	4.154E-08	4.118E-08	5.459E-08	3.715E-08	5.062E-08	3.532E-08	4.583E-08
4.40	3.443E-08	3.996E-08	3.963E-08	5.252E-08	3.572E-08	4.867E-08	3.396E-08	4.408E-08
4.50	3.316E-08	3.847E-08	3.817E-08	5.056E-08	3.439E-08	4.685E-08	3.269E-08	4.244E-08
4.60	3.198E-08	3.708E-08	3.679E-08	4.872E-08	3.312E-08	4.513E-08	3.149E-08	4.090E-08
4.70	3.088E-08	3.576E-08	3.549E-08	4.699E-08	3.194E-08	4.351E-08	3.036E-08	3.944E-08
4.80	2.972E-08	3.451E-08	3.426E-08	4.535E-08	3.081E-08	4.197E-08	2.929E-08	3.807E-08
4.90	2.871E-08	3.333E-08	3.309E-08	4.380E-08	2.975E-08	4.055E-08	2.828E-08	3.676E-08
5.00	2.774E-08	3.222E-08	3.199E-08	4.234E-08	2.875E-08	3.916E-08	2.733E-08	3.553E-08
5.10	2.683E-08	3.116E-08	3.095E-08	4.094E-08	2.780E-08	3.786E-08	2.643E-08	3.433E-08
5.20	2.597E-08	3.016E-08	2.996E-08	3.962E-08	2.690E-08	3.663E-08	2.557E-08	3.324E-08
5.30	2.515E-08	2.921E-08	2.902E-08	3.837E-08	2.605E-08	3.546E-08	2.476E-08	3.221E-08
5.40	2.437E-08	2.831E-08	2.813E-08	3.718E-08	2.524E-08	3.436E-08	2.399E-08	3.121E-08
5.50	2.363E-08	2.745E-08	2.728E-08	3.604E-08	2.447E-08	3.330E-08	2.326E-08	3.026E-08
6.00	2.044E-08	2.374E-08	2.360E-08	3.114E-08	2.113E-08	2.878E-08	2.009E-08	2.615E-08
7.50	1.413E-08	1.639E-08	1.630E-08	2.149E-08	1.458E-08	1.975E-08	1.386E-08	1.804E-08
10.00	8.334E-09	1.028E-08	1.027E-08	1.336E-08	9.101E-09	1.229E-08	8.702E-09	1.128E-08
15.00	4.648E-09	5.796E-09	5.804E-09	6.929E-09	4.810E-09	6.567E-09	4.590E-09	5.890E-09
20.00	2.947E-09	3.719E-09	3.724E-09	4.547E-09	3.050E-09	3.995E-09	2.915E-09	3.714E-09
25.00	2.033E-09	2.585E-09	2.595E-09	3.019E-09	2.133E-09	2.774E-09	2.041E-09	2.584E-09
30.00	1.559E-09	1.774E-09	1.782E-09	2.236E-09	1.587E-09	2.059E-09	1.520E-09	1.921E-09
35.00	1.213E-09	1.577E-09	1.385E-09	1.731E-09	1.233E-09	1.590E-09	1.181E-09	1.490E-09
40.00	9.737E-10	1.104E-09	1.111E-09	1.386E-09	9.889E-10	1.272E-09	9.480E-10	1.194E-09
45.00	8.013E-10	9.080E-10	9.142E-10	1.138E-09	8.132E-10	1.044E-09	7.798E-10	9.812E-10
50.00	6.725E-10	7.616E-10	7.671E-10	9.529E-10	6.821E-10	8.743E-10	6.542E-10	8.226E-10

Table 2.3-20

VENT RELEASE - EXIT VELOCITY OF 7.2 M/SECONDS
UNDEPLETED X/Q AT GROUND LEVEL APPLICABLE TO LONG
TERM (ROUTINE) GASEOUS RELEASES
(SECONDS/M^3)
SECTOR ANNUAL X/Q AT GROUND LEVEL

DISTANCE	SECTOR BEARING (DEGREES)							
MILES	202.5	225.0	247.5	270.0	292.5	315.0	337.5	360.0
3.70	5.158E-08	4.478E-08	3.164E-08	4.048E-08	3.068E-08	5.030E-08	6.538E-08	7.093E-08
3.80	4.934E-08	4.283E-08	3.026E-08	3.870E-08	2.935E-08	4.813E-08	6.254E-08	6.782E-08
3.90	4.725E-08	4.101E-08	2.897E-08	3.706E-08	2.812E-08	4.610E-08	5.989E-08	6.492E-08
4.00	4.531E-08	3.931E-08	2.777E-08	3.553E-08	2.696E-08	4.420E-08	5.741E-08	6.220E-08
4.10	4.348E-08	3.772E-08	2.665E-08	3.409E-08	2.588E-08	4.243E-08	5.508E-08	5.966E-08
4.20	4.177E-08	3.623E-08	2.559E-08	3.275E-08	2.486E-08	4.076E-08	5.291E-08	5.729E-08
4.30	4.016E-08	3.483E-08	2.460E-08	3.148E-08	2.391E-08	3.919E-08	5.086E-08	5.505E-08
4.40	3.865E-08	3.351E-08	2.367E-08	3.030E-08	2.301E-08	3.772E-08	4.894E-08	5.295E-08
4.50	3.723E-08	3.227E-08	2.280E-08	2.918E-08	2.216E-08	3.634E-08	4.713E-08	5.098E-08
4.60	3.588E-08	3.111E-08	2.198E-08	2.813E-08	2.136E-08	3.503E-08	4.542E-08	4.912E-08
4.70	3.462E-08	3.001E-08	2.120E-08	2.714E-08	2.061E-08	3.380E-08	4.382E-08	4.737E-08
4.80	3.342E-08	2.897E-08	2.047E-08	2.620E-08	1.989E-08	3.264E-08	4.230E-08	4.571E-08
4.90	3.229E-08	2.798E-08	1.977E-08	2.531E-08	1.922E-08	3.153E-08	4.086E-08	4.414E-08
5.00	3.122E-08	2.705E-08	1.912E-08	2.447E-08	1.858E-08	3.049E-08	3.950E-08	4.266E-08
5.10	3.021E-08	2.617E-08	1.850E-08	2.368E-08	1.797E-08	2.950E-08	3.821E-08	4.125E-08
5.20	2.924E-08	2.534E-08	1.791E-08	2.292E-08	1.739E-08	2.857E-08	3.698E-08	3.992E-08
5.30	2.833E-08	2.454E-08	1.735E-08	2.221E-08	1.685E-08	2.768E-08	3.582E-08	3.866E-08
5.40	2.746E-08	2.379E-08	1.682E-08	2.153E-08	1.633E-08	2.683E-08	3.472E-08	3.746E-08
5.50	2.663E-08	2.307E-08	1.632E-08	2.088E-08	1.583E-08	2.602E-08	3.367E-08	3.631E-08
6.00	2.305E-08	1.996E-08	1.413E-08	1.808E-08	1.367E-08	2.253E-08	2.911E-08	3.136E-08
7.50	1.597E-08	1.384E-08	9.851E-09	1.256E-08	9.372E-09	1.563E-08	2.010E-08	2.158E-08
10.00	1.005E-08	8.740E-09	6.296E-09	7.964E-09	5.746E-09	9.856E-09	1.257E-08	1.344E-08
15.00	5.303E-09	4.640E-09	3.419E-09	4.256E-09	2.875E-09	5.211E-09	6.550E-09	6.957E-09
20.00	3.366E-09	2.958E-09	2.212E-09	2.726E-09	1.757E-09	3.312E-09	4.123E-09	4.361E-09
25.00	2.356E-09	2.076E-09	1.568E-09	1.919E-09	1.199E-09	2.320E-09	2.870E-09	3.027E-09
30.00	1.754E-09	1.549E-09	1.178E-09	1.435E-09	8.768E-10	1.729E-09	2.129E-09	2.241E-09
35.00	1.364E-09	1.206E-09	9.211E-10	1.119E-09	6.731E-10	1.345E-09	1.651E-09	1.735E-09
40.00	1.095E-09	9.692E-10	7.427E-10	8.999E-10	5.352E-10	1.081E-09	1.323E-09	1.388E-09
45.00	9.012E-10	7.981E-10	6.132E-10	7.417E-10	4.373E-10	8.896E-10	1.087E-09	1.139E-09
50.00	7.564E-10	6.703E-10	5.160E-10	6.233E-10	3.650E-10	7.469E-10	9.110E-10	9.540E-10

TABLE 2.3-21

ACCIDENT X/Q ESTIMATES
(sec/m^3)

EAB (0.79 Miles)	2 Hours	8 Hours	16 Hours	3 Days	26 Days	Annual
Conservative Estimate	1.30E-04	6.07E-05	4.15E-05	1.82E-05	5.55E-06	1.30E-06
Realistic Estimate	3.00E-05	1.79E-05	1.38E-05	7.87E-06	3.51E-06	1.31E-06
LPZ (5.0 Miles)						
Conservative Estimate	1.86E-05	7.76E-06	5.01E-06	1.94E-06	4.96E-07	9.37E-08
Realistic Estimate	2.35E-06	1.38E-06	1.06E-06	5.93E-07	2.59E-07	9.37E-08

TABLE 2.3-22

ACCIDENT X/Q VALUES AT LPZ BY SECTOR
(sec/m^3)

Sector Bearing	0.5 percent (2) X/Q	Annual X/Q
NNE	8.20E-06	7.26E-08
NE	9.20E-06	7.73E-08
ENE	8.80E-06	6.23E-08
E	7.70E-06	6.04E-08
ESE	7.00E-06	6.11E-08
SE	8.40E-06	8.27E-08
SSE	8.40E-06	7.76E-08
S	1.00E-05	8.02E-08
SSW	1.20E-05	8.93E-08
SW	1.20E-05	8.77E-08
WSW	1.05E-05	6.62E-08
W	9.40E-06	5.42E-08
WNW	9.50E-06	5.10E-08
NW	1.86E-05 (1)	9.37E-08
NNW	1.40E-05	8.59E-08
N	8.50E-06	6.61E-08
Overall 5 percent	1.29E-05	

(1) 1.86E-05 is the maximum 0.5 percent X/Q (Conservative at the LPZ)
(2) Two Hour value