Appendix A4 Dilution Factor for Air Dispersion Modeling (Based on unit emission)

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 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 96043 ***

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE              =        AREA

   EMISSION RATE (g/s                =     0.100000E+01
   SOURCE HEIGHT (M)         =      6.0000
   LENGTH OF LARGER SIDE (M)   =      10.0000
   LENGTH OF SMALLER SIDE (M)  =      10.0000
   RECEPTOR HEIGHT (M)        =      0.0000
   URBAN/RURAL OPTION         =       RURAL
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

   MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX =    0.000 M**4/S**3;  MOM. FLUX =    0.000 M**4/S**2.

*** STABILITY CLASS  F ONLY ***
*** ANEMOMETER HEIGHT WIND SPEED OF   1.00 M/S ONLY ***

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*** SCREEN AUTOMATED DISTANCES ***
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*** TERRAIN HEIGHT OF      0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

  DIST     CONC        U10M   USTK  MIX HT   PLUME  MAX DIR
  (M)   (UG/M**3)   STAB  (M/S)  (M/S)    (M)   HT (M)   (DEG)
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  1000   611.1       6    1.0    1.0 10000.0    6.00    34.
  1100   533.2       6    1.0    1.0 10000.0    6.00    31.
  1200   470.3       6    1.0    1.0 10000.0    6.00    37.
  1300   418.7       6    1.0    1.0 10000.0    6.00    33.
  1400   375.8       6    1.0    1.0 10000.0    6.00    31.
  1500   339.6       6    1.0    1.0 10000.0    6.00    33.
  1600   308.9       6    1.0    1.0 10000.0    6.00    31.
  1700   282.4       6    1.0    1.0 10000.0    6.00    33.
  1800   259.5       6    1.0    1.0 10000.0    6.00    33.
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1900	239.5	6	1.0	1.0	10000.0	6.00	33.
2000	221.9	6	1.0	1.0	10000.0	6.00	33.
2100	207.1	6	1.0	1.0	10000.0	6.00	39.
2200	194.0	6	1.0	1.0	10000.0	6.00	34.
2300	182.1	6	1.0	1.0	10000.0	6.00	34.
2400	171.5	6	1.0	1.0	10000.0	6.00	39.
2500	161.8	6	1.0	1.0	10000.0	6.00	39.
2600	153.1	6	1.0	1.0	10000.0	6.00	39.
2700	145.1	6	1.0	1.0	10000.0	6.00	34.
2800	137.8	6	1.0	1.0	10000.0	6.00	34.
2900	131.1	6	1.0	1.0	10000.0	6.00	39.
3000	124.9	6	1.0	1.0	10000.0	6.00	39.
3500	101.5	6	1.0	1.0	10000.0	6.00	39.
4000	84.80	6	1.0	1.0	10000.0	6.00	39.
4500	72.35	6	1.0	1.0	10000.0	6.00	39.
5000	62.76	6	1.0	1.0	10000.0	6.00	39.
5500	55.19	6	1.0	1.0	10000.0	6.00	39.
6000	49.07	6	1.0	1.0	10000.0	6.00	39.
6500	44.05	6	1.0	1.0	10000.0	6.00	39.
7000	39.86	6	1.0	1.0	10000.0	6.00	36.
7500	36.43	6	1.0	1.0	10000.0	6.00	39.
8000	33.50	6	1.0	1.0	10000.0	6.00	35.
8500	30.96	6	1.0	1.0	10000.0	6.00	33.
9000	28.74	6	1.0	1.0	10000.0	6.00	33.
9500	26.79	6	1.0	1.0	10000.0	6.00	33.
10000	25.06	6	1.0	1.0	10000.0	6.00	33.
15000	14.81	6	1.0	1.0	10000.0	6.00	39.
20000	10.46	6	1.0	1.0	10000.0	6.00	38.
25000	7.998	6	1.0	1.0	10000.0	6.00	38.
30000	6.426	6	1.0	1.0	10000.0	6.00	38.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1000. M:

1000.	611.1	6	1.0	1.0	10000.0	6.00	34.

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*** SUMMARY OF SCREEN MODEL RESULTS ***
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CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	611.1	1000.	0.

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** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
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