APPENDIX 6.15-B – MODELING OUTPUTS

```
06/06/07

14:19:23
  ***  SCREEN3 MODEL RUN  ***
  *** VERSION DATED 96043 ***

 ORANGE GROVE PROJECT - ALTERNATE SCENARIO

 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE                =         AREA
    EMISSION RATE (G/(S-M**2)) =      2.18000
    SOURCE HEIGHT (M)          =        .0000
    LENGTH OF LARGER SIDE (M)  =       6.4000
    LENGTH OF SMALLER SIDE (M) =       1.2200
    RECEPTOR HEIGHT (M)        =        .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 =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

 *** STABILITY CLASS  4 ONLY ***
 *** ANEMOMETER HEIGHT WIND SPEED OF   3.00 M/S ONLY ***

 **********************************
 *** SCREEN AUTOMATED DISTANCES ***
 **********************************

 *** 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)
 -------  ----------  ----  -----  -----  ------  ------  -------
      1.   .1041E+08    4     3.0    3.0   960.0     .00      1.
    100.   .4719E+05    4     3.0    3.0   960.0     .00      1.
    200.   .1360E+05    4     3.0    3.0   960.0     .00      1.
    300.   6580.        4     3.0    3.0   960.0     .00      1.
    400.   4000.        4     3.0    3.0   960.0     .00      1.
    500.   2721.        4     3.0    3.0   960.0     .00      1.
    600.   1985.        4     3.0    3.0   960.0     .00      1.
    700.   1522.        4     3.0    3.0   960.0     .00      1.
    800.   1209.        4     3.0    3.0   960.0     .00      1.
    900.   986.6        4     3.0    3.0   960.0     .00      1.
   1000.   823.0        4     3.0    3.0   960.0     .00      1.

 MAXIMUM 1-HR CONCENTRATION AT OR BEYOND     1. M:
      4.   .1378E+08    4     3.0    3.0   960.0     .00      0.
```

```
*********************************
 *** SCREEN DISCRETE DISTANCES ***
 *********************************

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

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
40.	.2459E+06	4	3.0	3.0	960.0	.00	0.
42.	.2252E+06	4	3.0	3.0	960.0	.00	0.
43.	.2158E+06	4	3.0	3.0	960.0	.00	0.
44.	.2070E+06	4	3.0	3.0	960.0	.00	0.
46.	.1911E+06	4	3.0	3.0	960.0	.00	0.
48.	.1770E+06	4	3.0	3.0	960.0	.00	0.
50.	.1644E+06	4	3.0	3.0	960.0	.00	0.
53.	.1480E+06	4	3.0	3.0	960.0	.00	0.
56.	.1341E+06	4	3.0	3.0	960.0	.00	0.
60.	.1184E+06	4	3.0	3.0	960.0	.00	0.
61.	.1150E+06	4	3.0	3.0	960.0	.00	0.
63.	.1085E+06	4	3.0	3.0	960.0	.00	0.
64.	.1053E+06	4	3.0	3.0	960.0	.00	1.
65.	.1024E+06	4	3.0	3.0	960.0	.00	1.
75.	.7917E+05	4	3.0	3.0	960.0	.00	1.
80.	.7049E+05	4	3.0	3.0	960.0	.00	1.
90.	.5703E+05	4	3.0	3.0	960.0	.00	1.
94.	.5274E+05	4	3.0	3.0	960.0	.00	1.
95.	.5175E+05	4	3.0	3.0	960.0	.00	1.
98.	.4893E+05	4	3.0	3.0	960.0	.00	1.
100.	.4719E+05	4	3.0	3.0	960.0	.00	1.
105.	.4323E+05	4	3.0	3.0	960.0	.00	1.
115.	.3671E+05	4	3.0	3.0	960.0	.00	1.
116.	.3614E+05	4	3.0	3.0	960.0	.00	1.
117.	.3559E+05	4	3.0	3.0	960.0	.00	1.
118.	.3505E+05	4	3.0	3.0	960.0	.00	1.
119.	.3452E+05	4	3.0	3.0	960.0	.00	1.

```
      ***************************************
      *** SUMMARY OF SCREEN MODEL RESULTS ***
      ***************************************
```

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.1378E+08	4.	0.

```
****************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****************************************************
```

```
06/06/07

14:13:58
  ***  SCREEN3 MODEL RUN  ***
  *** VERSION DATED 96043 ***

 ORANGE GROVE PROJECT - WORST CASE SCENARIO

 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE                =         AREA
    EMISSION RATE (G/(S-M**2)) =      .320000
    SOURCE HEIGHT (M)          =        .0000
    LENGTH OF LARGER SIDE (M)  =      15.2000
    LENGTH OF SMALLER SIDE (M) =       6.0800
    RECEPTOR HEIGHT (M)        =        .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 =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

 *** STABILITY CLASS  6 ONLY ***
 *** ANEMOMETER HEIGHT WIND SPEED OF   1.50 M/S ONLY ***

 **********************************
 *** SCREEN AUTOMATED DISTANCES ***
 **********************************

 *** 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)
 -------  ----------  ----  -----  -----  ------  ------  -------
      1.   .8413E+07    6     1.5    1.5 10000.0     .00     18.
    100.   .6081E+06    6     1.5    1.5 10000.0     .00      0.
    200.   .1937E+06    6     1.5    1.5 10000.0     .00      0.
    300.   .9808E+05    6     1.5    1.5 10000.0     .00      0.
    400.   .6042E+05    6     1.5    1.5 10000.0     .00      0.
    500.   .4139E+05    6     1.5    1.5 10000.0     .00      0.
    600.   .3037E+05    6     1.5    1.5 10000.0     .00      0.
    700.   .2340E+05    6     1.5    1.5 10000.0     .00      0.
    800.   .1891E+05    6     1.5    1.5 10000.0     .00      0.
    900.   .1567E+05    6     1.5    1.5 10000.0     .00      0.
   1000.   .1324E+05    6     1.5    1.5 10000.0     .00      0.
   1100.   .1143E+05    6     1.5    1.5 10000.0     .00      0.
   1200.   9993.        6     1.5    1.5 10000.0     .00      0.
   1300.   8831.        6     1.5    1.5 10000.0     .00      0.
   1400.   7877.        6     1.5    1.5 10000.0     .00      0.
   1500.   7082.        6     1.5    1.5 10000.0     .00      0.
   1600.   6411.        6     1.5    1.5 10000.0     .00      0.
```

```
   1700.   5839.        6     1.5    1.5 10000.0     .00      0.
   1800.   5347.        6     1.5    1.5 10000.0     .00      0.
   1900.   4920.        6     1.5    1.5 10000.0     .00      0.
   2000.   4547.        6     1.5    1.5 10000.0     .00      0.
MAXIMUM 1-HR CONCENTRATION AT OR BEYOND     1. M:
      9.   .1150E+08    6     1.5    1.5 10000.0     .00     15.

 ********************************
 *** SCREEN DISCRETE DISTANCES ***
 ********************************

 *** 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)
 -------  ----------  ----  -----  -----  ------  ------  -------
    175.   .2424E+06    6     1.5    1.5 10000.0     .00      0.
    180.   .2312E+06    6     1.5    1.5 10000.0     .00      0.
    190.   .2112E+06    6     1.5    1.5 10000.0     .00      0.
    191.   .2093E+06    6     1.5    1.5 10000.0     .00      0.
    192.   .2075E+06    6     1.5    1.5 10000.0     .00      0.
    250.   .1333E+06    6     1.5    1.5 10000.0     .00      0.
    275.   .1136E+06    6     1.5    1.5 10000.0     .00      0.
    280.   .1102E+06    6     1.5    1.5 10000.0     .00      0.
    281.   .1095E+06    6     1.5    1.5 10000.0     .00      0.
    282.   .1089E+06    6     1.5    1.5 10000.0     .00      0.
    283.   .1082E+06    6     1.5    1.5 10000.0     .00      0.
    285.   .1070E+06    6     1.5    1.5 10000.0     .00      0.
    287.   .1057E+06    6     1.5    1.5 10000.0     .00      0.
    288.   .1051E+06    6     1.5    1.5 10000.0     .00      0.
    289.   .1045E+06    6     1.5    1.5 10000.0     .00      0.
    290.   .1039E+06    6     1.5    1.5 10000.0     .00      0.
    400.   .6042E+05    6     1.5    1.5 10000.0     .00      0.
    430.   .5347E+05    6     1.5    1.5 10000.0     .00      0.
    435.   .5243E+05    6     1.5    1.5 10000.0     .00      0.
    436.   .5223E+05    6     1.5    1.5 10000.0     .00      0.
    437.   .5203E+05    6     1.5    1.5 10000.0     .00      0.
    550.   .3520E+05    6     1.5    1.5 10000.0     .00      0.
    554.   .3477E+05    6     1.5    1.5 10000.0     .00      0.
    553.   .3488E+05    6     1.5    1.5 10000.0     .00      0.

      ****************************************
      *** SUMMARY OF SCREEN MODEL RESULTS ***
      ****************************************

  CALCULATION        MAX CONC    DIST TO   TERRAIN
   PROCEDURE        (UG/M**3)    MAX (M)    HT (M)
 --------------    -----------   -------   -------
 SIMPLE TERRAIN      .1150E+08        9.        0.


 ****************************************************
 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
 ****************************************************
```