
APPENDIX B
MODELING RESULTS FOR RISK CALCULATIONS

CO STARTING
 CO TITLEONE HAT Creek Hwy 89
 CO MODELOPT CONC RURAL DFAULT
 CO AVERTIME PERIOD
 CO POLLUTID OTHER
 CO RUNORNOT RUN
 CO FINISHED

SO STARTING
 SO LOCATION line1 AREA 0 0 0
 SO SRCPARAM line1 2.12E-9 1 7.3 1000 -5 2.5
 SO SRCGROUP ALL
 SO FINISHED

RE STARTING
 RE GRIDCART GRID2 STA
 RE GRIDCART GRID2 XYINC -200 9 25 -200 9 25
 RE GRIDCART GRID2 END
 RE DISCCART 86 0
 RE DISCCART 122 0
 RE DISCCART -86 0
 RE DISCCART -122 0
 RE FINISHED

ME STARTING
 ME INPUTFIL sold95.asc
 ME ANEMHIGHT 10 METERS
 ME SURFDATA 0 1995
 ME UAIRDATA 24225 1995
 ME FINISHED

OU STARTING
 OU PLOTFILE PERIOD ALL hatcreek.PLT
 OU FINISHED

*** Message Summary For ISC3 Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
 A Total of 1 Warning Message(s)
 A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
 *** NONE ***

***** WARNING MESSAGES *****
 SO W391 11 APARM :Aspect ratio (L/W) of area source greater than 10 LINE1

***** SETUP Finishes Successfully *****

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RURAL FLAT DFAULT PAGE 1

*** MODEL SETUP OPTIONS SUMMARY ***

Intermediate Terrain Processing is Selected

Model Is Setup For Calculation of Average Concentration Values.

-- SCAVENGING/DEPOSITION LOGIC --

Model Uses NO DRY DEPLETION. DDPLETE = F

Model Uses NO WET DEPLETION. WDPLETE = F

NO WET SCAVENGING Data Provided.

Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

Model Uses RURAL Dispersion.

Model Uses Regulatory DEFAULT Options:

1. Final Plume Rise.
2. Stack-tip Downwash.
3. Buoyancy-induced Dispersion.
4. Use Calms Processing Routine.
5. Not Use Missing Data Processing Routine.
6. Default Wind Profile Exponents.
7. Default Vertical Potential Temperature Gradients.
8. "Upper Bound" Values for Supersquat Buildings.
9. No Exponential Decay for RURAL Mode

Model Assumes Receptors on FLAT Terrain.

Model Assumes No FLAGPOLE Receptor Heights.

Model Calculates PERIOD Averages Only

This Run Includes: 1 Source(s); 1 Source Group(s); and 85 Receptor(s)

The Model Assumes A Pollutant Type of: OTHER

Model Set To Continue RUNNING After the Setup Testing.

Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

Misc. Inputs: Anem. Hgt (m) = 10.00; Decay Coef. = 0.0000; Rot. Angle = 0.0
Emission Units = GRAMS/SEC; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

Approximate Storage Requirements of Model = 1.2 MB of RAM.

Input Runstream File: NSGRID.INP

**Output Print File: NSGRID.OUT

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**MODELOPTS: CONC RURAL FLAT DFAULT

*** AREA SOURCE DATA ***

NUMBER EMISSION RATE COORD (SW CORNER) BASE RELEASE X-DIM Y-DIM ORIENT. INIT. EMISSION RATE
 SOURCE PART. (GRAMS/SEC X Y ELEV. HEIGHT OF AREA OF AREA OF AREA SZ SCALAR VARY
 ID CATS. /METER**2) (METERS)(METERS)(METERS) (METERS) (DEG.) (METERS) BY

 LINE1 0 0.21200E-08 0.0 0.0 0.0 1.00 7.30 1000.00 -5.00 2.50

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**MODELOPTS: CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL LINE1 .

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**MODELOPTS: CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID2 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-200.0, -175.0, -150.0, -125.0, -100.0, -75.0, -50.0, -25.0, 0.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-200.0, -175.0, -150.0, -125.0, -100.0, -75.0, -50.0, -25.0, 0.0,

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**MODELOPTS: CONC RURAL FLAT DFAULT

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZFLAG)
 (METERS)

```
( 86.0, 0.0, 0.0, 0.0); ( 122.0, 0.0, 0.0, 0.0); 
(-86.0, 0.0, 0.0, 0.0); (-122.0, 0.0, 0.0, 0.0);
```

□□□

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***
 FILE: sold95.asc
 FORMAT: (4I2,F9.4,F6.1,I2,F7.1,F9.4,F10.1,F8.4,I4,F7.2)
 SURFACE STATION NO.: 0 UPPER AIR STATION NO.: 24225
 NAME: UNKNOWN NAME: UNKNOWN
 YEAR: 1995 YEAR: 1995

FLOW SPEED TEMP STAB MIXING HEIGHT (M) USTAR M-O LENGTH Z-0 IPCODE PRATE
 YR MN DY HR VECTOR (M/S) (K) CLASS RURAL URBAN (M/S) (M) (M) (mm/HR)

YR	MN	DY	HR	VECTOR (M/S)	(K)	CLASS	RURAL	URBAN	(M/S)	(M)	(M)	(mm/HR)	
95	1	1	1	0.0	0.00	273.1	7	684.3	380.0	0.0000	0.0	0.0000	0.00
95	1	1	2	0.0	0.00	273.1	7	717.6	380.0	0.0000	0.0	0.0000	0.00
95	1	1	3	0.0	0.00	273.1	7	750.8	380.0	0.0000	0.0	0.0000	0.00
95	1	1	4	0.0	0.00	273.1	7	784.0	380.0	0.0000	0.0	0.0000	0.00
95	1	1	5	0.0	0.00	273.1	7	817.2	380.0	0.0000	0.0	0.0000	0.00
95	1	1	6	0.0	0.00	273.1	7	850.4	380.0	0.0000	0.0	0.0000	0.00
95	1	1	7	0.0	0.00	273.1	7	883.6	380.0	0.0000	0.0	0.0000	0.00
95	1	1	8	0.0	0.00	273.1	6	674.4	424.5	0.0000	0.0	0.0000	0.00
95	1	1	9	0.0	0.00	273.1	5	242.2	539.7	0.0000	0.0	0.0000	0.00
95	1	1	10	0.0	0.00	273.1	4	417.0	655.0	0.0000	0.0	0.0000	0.00
95	1	1	11	0.0	0.00	273.1	3	591.7	770.2	0.0000	0.0	0.0000	0.00
95	1	1	12	0.0	0.00	273.1	2	766.5	885.5	0.0000	0.0	0.0000	0.00
95	1	1	13	0.0	0.00	273.1	2	941.2	1000.7	0.0000	0.0	0.0000	0.00
95	1	1	14	0.0	0.00	273.1	2	1116.0	1116.0	0.0000	0.0	0.0000	0.00
95	1	1	15	0.0	0.00	273.1	3	1116.0	1116.0	0.0000	0.0	0.0000	0.00
95	1	1	16	0.0	0.00	273.1	3	1116.0	1116.0	0.0000	0.0	0.0000	0.00
95	1	1	17	0.0	0.00	273.1	4	1106.7	1106.7	0.0000	0.0	0.0000	0.00
95	1	1	18	0.0	0.00	273.1	5	1075.1	930.6	0.0000	0.0	0.0000	0.00
95	1	1	19	0.0	0.00	273.1	6	1043.4	787.2	0.0000	0.0	0.0000	0.00
95	1	1	20	0.0	0.00	273.1	7	1011.8	643.7	0.0000	0.0	0.0000	0.00
95	1	1	21	0.0	0.00	273.1	7	980.1	500.3	0.0000	0.0	0.0000	0.00
95	1	1	22	0.0	0.00	273.1	7	948.5	356.9	0.0000	0.0	0.0000	0.00
95	1	1	23	0.0	0.00	273.1	7	916.8	213.4	0.0000	0.0	0.0000	0.00
95	1	1	24	0.0	0.00	273.1	7	885.2	70.0	0.0000	0.0	0.0000	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
 FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

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**MODELOFTS: CONC RURAL FLAT DEFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): LINE1 ,

*** NETWORK ID: GRID2 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)	-200.00	-175.00	-150.00	-125.00	-100.00	-75.00	-50.00	-25.00	0.00
0.00	|	0.00019	0.00022	0.00026	0.00031	0.00039	0.00051	0.00071	0.00110	0.00280
-25.00	|	0.00018	0.00020	0.00023	0.00028	0.00035	0.00045	0.00060	0.00086	0.00149
-50.00	|	0.00017	0.00019	0.00022	0.00025	0.00031	0.00039	0.00051	0.00069	0.00107
-75.00	|	0.00016	0.00017	0.00020	0.00023	0.00028	0.00035	0.00044	0.00058	0.00084
-100.00	|	0.00015	0.00016	0.00018	0.00021	0.00025	0.00030	0.00039	0.00051	0.00069
-125.00	|	0.00014	0.00015	0.00017	0.00019	0.00022	0.00027	0.00034	0.00046	0.00058
-150.00	|	0.00013	0.00014	0.00015	0.00017	0.00020	0.00025	0.00031	0.00041	0.00050
-175.00		0.00012	0.00013	0.00014	0.00015	0.00018	0.00023	0.00029	0.00038	0.00044
-200.00		0.00011	0.00012	0.00013	0.00014	0.00017	0.00021	0.00027	0.00034	0.00039

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**MODELOPTS: CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): LINE1

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
86.00	0.00	0.00024	122.00	0.00	0.00017
-86.00	0.00	0.00045	-122.00	0.00	0.00032

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*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG) OF TYPE GRID-ID
ALL	0.00280 AT (	0.00, 0.00, 0.00, 0.00) GC GRID2
2ND HIGHEST VALUE IS	0.00149 AT (	0.00, -25.00, 0.00, 0.00) GC GRID2
3RD HIGHEST VALUE IS	0.00110 AT (	-25.00, 0.00, 0.00, 0.00) GC GRID2
4TH HIGHEST VALUE IS	0.00107 AT (	0.00, -50.00, 0.00, 0.00) GC GRID2
5TH HIGHEST VALUE IS	0.00086 AT (	-25.00, 0.00, 0.00, 0.00) GC GRID2
6TH HIGHEST VALUE IS	0.00084 AT (	0.00, -75.00, 0.00, 0.00) GC GRID2
7TH HIGHEST VALUE IS	0.00071 AT (	-50.00, 0.00, 0.00, 0.00) GC GRID2
8TH HIGHEST VALUE IS	0.00069 AT (	-25.00, -50.00, 0.00, 0.00) GC GRID2
9TH HIGHEST VALUE IS	0.00069 AT (	0.00, -100.00, 0.00, 0.00) GC GRID2
10TH HIGHEST VALUE IS	0.00060 AT (	-50.00, -25.00, 0.00, 0.00) GC GRID2

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

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**MODELOPTs: CONC RURAL FLAT DFAULT

*** Message Summary : ISCS T3 Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1639 Informational Message(s)
A Total of 1639 Calm Hours Identified

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
SO W391 11 APARM :Aspect ratio (L/W) of area source greater than 10 LINE1

***** ISCS T3 Finishes Successfully *****