

## **Appendix B Sample Ausplume File**

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6.0 version
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* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *
*
* This is a generated file. Please do not edit it manually. *
* If editing is required, under any circumstances do not *
* edit information enclosed in curly braces. Corruption of *
* this information or changed order of data blocks enclosed *
* in curly braces may render the file unusable. *
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Simulation Title  
{EAW - PM10 - Construction}  
Concentration(1)/Deposition(0), Emission rate units,  
Concentration/Deposition units,Background Concentration, Variable  
Background flag,Variable Emission Flag  
{True grams/second microgram/m3 0 False False }

Terrain influence tag, 0-ignore, 1 - include  
{0}  
Egan coefficients  
{0.5 0.5 0.5 0.7 0.7 }  
Number of source groups  
{0}  
Total number of sources (Stack + Area + Volume sources)  
{4}

Source Group information  
BPIP Run (1-True, 0-False)  
{0 }  
Total number of buildings  
{0 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z  
coordinates  
{BD1 3 705842 8619088 0 }  
Source height  
{1 0 }  
Side length, Effective Radius  
{1 1 }  
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and  
stability, 5-hour and season, 6-temperarture), Position in Array, Number of  
particle fractions  
{1 0 }  
Constant emission rate  
{1.11}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z  
coordinates  
{BD2 3 705408 8618737 0 }  
Source height  
{1 0 }  
Side length, Effective Radius  
{1 1 }  
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and  
stability, 5-hour and season, 6-temperarture), Position in Array, Number of  
particle fractions  
{1 0 }  
Constant emission rate  
{1.11}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z  
coordinates  
{TD 3 705569 8618922 0 }  
Source height  
{1 0 }  
Side length, Effective Radius  
{1 1 }  
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

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stability, 5-hour and season, 6-temperarture), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0002}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WE 3 705864 8618920 0 }
Source height
{1 0 }
Side length, Effective Radius
{1 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperarture), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.17}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of Receptors
{1 2 }
X, Y coordinates and Elevation
{700862 8620882 1 }
X, Y coordinates and Elevation
{708863 8623458 1 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 51 51 1 }

X grid coordinates
{702882 702982 703082 703182 703282 703382 703482 703582 703682 703782
703882 703982 704082 704182 704282 704382 704482 704582 704682 704782
704882 704982 705082 705182 705282 705382 705482 705582 705682 705782
705882 705982 706082 706182 706282 706382 706482 706582 706682 706782
706882 706982 707082 707182 707282 707382 707482 707582 707682 707782
707882 }

Y grid coordinates
{8617682 8617742 8617802 8617862 8617922 8617982 8618042 8618102 8618162
8618222 8618282 8618342 8618402 8618462 8618522 8618582 8618642 8618702
8618762 8618822 8618882 8618942 8619002 8619062 8619122 8619182 8619242
8619302 8619362 8619422 8619482 8619542 8619602 8619662 8619722 8619782
8619842 8619902 8619962 8620022 8620082 8620142 8620202 8620262 8620322
8620382 8620442 8620502 8620562 8620622 8620682 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1000000 0 }

Land use (surface roughness)
{0.4}

Averaging time flags (1,2,3,4,6,8,12,24 hrs, 7, 90 days, 3 month, All hrs
{0 0 0 0 0 0 1 0 0 0 0 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd
highest, 100 worst case table, Save all calculations
{0 0 0 1 0 0 }
Write concentration (1-yes, 0-no), Concentration rank, Write frequency,
Frequency Level
{1 1 0 -1 }

Disregard exponents (1-yes, 0-no), Exponent Scheme (1-Irvin urban, 2-Irvin

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rural, 3-ISCST, 4-User Defined
{0 1 }

Dispersion exponents
{0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.2 0.2 0.2
0.2 0.2 0.2 0.25 0.25 0.25 0.25 0.25 0.25 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.6 0.6
0.6 0.6 0.6 0.6 }

Building wake effects (1-include,0-not) , Default decay coefficient,
Anemometr height, Sigma-theta averaging period, Roughness at vane site,
Smooth stability changes, ConvectivePDF)
{1 0 10 60 0.3 0 0 }

Deposition options, Depletion options
{False False False False False False }

Stability class adjustments (0-None, 1-Urban1, 2-Urban2)
{0}

Building wake algorithms (1-Huber-Sneider, 2-Hybrid, 3-Schulman-Scire)
{4}

Gradual plume rise (1-yes,0-no), Stack tip downwash (1-yes,0-no), Disregard
Temperature Gradient (1-yes,0-no), Partial Penetration, Temp Gradient,
Adiabatic Entrainment, Stable Entrainment
{1 1 0 0 0.004 0.6 0.6 }

Temperature Gradients for Wind and Stability categories
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.02 0.02 0.02 0.02 0.02
0.02 0.035 0.035 0.035 0.035 0.035 0.035 }

Dispersion curves (1-Pasquill Gifford, 2- Briggs rural, 3-Sigma theta)
horizontal < 100 m, ditto vertical < 100 m, ditto horizontal > 100 m, ditto
vertical > 100 m
{3 1 2 2 }

Adjust PG curves for roughness - Horizontal, Vertical (1-yes,0-no)
{1 1 }

Enhance plume for buoyancy - Horizontal, Vertical (1-yes,0-no)
{1 1 }

Adjust for wind direction shear
{0}

Shear rates
{0.005 0.01 0.015 0.02 0.025 0.035 }

Wind Speed categories
{1.54 3.09 5.14 8.23 10.8 }

Output file
{'E:\AUSPLUME\EAW\Construction\PM10_Out.TXT'}
Meteorological file
{'E:\AUSPLUME\EAW\t010a_m01101301.apl'}
Concentration file
{'E:\AUSPLUME\EAW\Construction\PM10_Max.dat'}

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