

Appendix H
Air Quality Model

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BPIP PROCESSING INFORMATION:

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INPUT SUMMARY:

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Number of buildings to be processed : 2

Stores has 1 tier(s) with a base elevation of 36.00 metres

BUILDING NAME	TIER NUMBER	BLDG-TIER NUMBER	TIER HEIGHT	NO. OF CORNERS	CORNER X	COORDINATES Y
Stores	1	1	20.00	4	616530.00	8182437.00 meters
					616693.00	8182480.00 meters
					616702.00	8182446.00 meters
					616539.00	8182403.00 meters

OCWS has 1 tier(s) with a base elevation of 36.00 metres

BUILDING NAME	TIER NUMBER	BLDG-TIER NUMBER	TIER HEIGHT	NO. OF CORNERS	CORNER X	COORDINATES Y
OCWS	1	5	20.00	4	616644.00	8182706.00 meters
					616680.00	8182717.00 meters
					616723.00	8182556.00 meters
					616687.00	8182547.00 meters

Number of stacks to be processed : 2

STACK NAME	STACK BASE	STACK HEIGHT	STACK X	COORDINATES Y
OldPS	36.00	23.00 metres	614980.00	8184300.00 metres
NewPS	36.00	23.00 metres	615000.00	8184400.00 metres

No stacks have been detected as being atop any structures.

Overall GEP Summary Table
(Units: meters)

StkNo: 1 Stk Name: OldPS Stk Ht: 23.00 Prelim. GEP Stk.Ht: 65.00
 GEP: BH: 0.00 PBW: 0.00 *Eqn1 Ht: 0.00
 No tiers affect this stack.

StkNo: 2 Stk Name: NewPS Stk Ht: 23.00 Prelim. GEP Stk.Ht: 65.00

GEP: BH: 0.00 PBW: 0.00 *Eqn1 Ht: 0.00
No tiers affect this stack.

Summary By Direction Table
(Units: meters)

Dominated stand alone tiers:

Drctn: 10.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drctn: 20.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drctn: 30.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drctn: 40.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drctn: 50.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drctn: 60.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 70.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 80.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 90.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 100.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 110.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 120.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 130.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 140.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 150.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 160.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 170.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 180.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 190.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 200.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 210.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 220.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 230.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 240.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 250.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 260.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 270.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 280.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 290.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 300.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 310.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 320.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 330.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 340.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 350.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Drtcn: 360.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No single tier affects this stack for this direction.

Dominant combined buildings:

Drtcn: 10.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 20.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 30.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 40.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 50.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 60.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 70.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 80.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 90.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 100.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 110.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 120.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 130.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 140.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 150.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 160.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 170.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 180.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 190.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 200.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 210.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00

GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 220.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 230.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 240.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 250.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 260.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 270.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 280.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 290.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 300.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 310.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 320.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 330.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00

No combined tiers affect this stack for this direction.

Drtcn: 340.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 350.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

Drtcn: 360.00

StkNo: 1 Stk Name: OldPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.
StkNo: 2 Stk Name: NewPS Stack Ht: 23.00
GEP: BH: 0.00 PBW: 0.00 *Equation 1 Ht: 0.00
No combined tiers affect this stack for this direction.

=====

BPIP PROCESSING INFORMATION:

=====

PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
OldPS	23.00	N/A	0.00	65.00
NewPS	23.00	N/A	0.00	65.00

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP Technical Support Document. Determinant 3 may be investigated for additional stack height credit. Final values result after Determinant 3 has been taken into consideration.

** Results were derived from Equation 1 on page 6 of GEP Technical Support Document. Values have been adjusted for any stack-building base elevation differences.

Note: Criteria for determining stack heights for modeling emission limitations for a source can be found in Table 3.1 of the GEP Technical Support Document.

BPIP output is in meters

SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	OldPS	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	OldPS	0.00	0.00	0.00	0.00	0.00	0.00

5.0 version

```
*****  
* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *  
*  
* This is a generated file. Please do not edit it manually. *  
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* 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. *  
*  
*****
```

Simulation Title

```
{McArthur River Mine CO Emissions 2005 1.8 Mtpa}  
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```

{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{3.2}
Building width
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building height
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter1
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter2
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter3
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }

```

Receptor information

Discrete receptors

```

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

```

Gridded receptors

```

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

```

X grid coordinates

```

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

```

Y grid coordinates

```

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

```

Model settings and parameters

```

Emission conversion factor, Averaging Time
{1000000 15 }

```

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 0 0 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 1 0 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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
{1 1 2 2 }

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

Enhance plume for buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO(15-min).txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO(15-min).dat'}
```

5.0 version

```
*****
* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *
*
* This is a generated file. Please do not edit it manually. *
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* this information or changed order of data blocks enclosed *
* in curly braces may render the file unusable. *
*
*****
```

Simulation Title

```
{McArthur River Mine CO Emissions 2005 1.8 Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```

{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{3.2}
Building width
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building height
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter1
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter2
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter3
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }

```

Receptor information

Discrete receptors

```

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

```

Gridded receptors

```

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

```

X grid coordinates

```

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

```

Y grid coordinates

```

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

```

Model settings and parameters

```

Emission conversion factor, Averaging Time
{1000000 15 }

```

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 0 0 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 1 0 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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
{1 1 2 2 }

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

Enhance plume for buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO(15-min).txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO(15-min).dat'}
```

5.0 version

```
*****
* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *
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*
*****
```

Simulation Title

```
{McArthur River Mine CO Emissions 2005 1.8 Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{3.2}
Building width
{0 }
Building height
{0 }
Building BPIP parameter1
{0 }
Building BPIP parameter2
{0 }
Building BPIP parameter3
{0 }

Receptor information

Discrete receptors

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

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

{1 0 0 0 0 1 0 0 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 1 0 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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 buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO.txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\CO.dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines NOx emissions 2005 1.8 Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```

{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{14}
Building width
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building height
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter1
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter2
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter3
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }

```

Receptor information

Discrete receptors

```

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

```

Gridded receptors

```

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

```

X grid coordinates

```

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

```

Y grid coordinates

```

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

```

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

{1 0 0 0 0 0 0 0 0 0 0 1 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations
{0 0 1 0 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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 buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\NOx.txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\NOx.dat'}
```

6.0 version

```
*****
* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *
*
* This is a generated file. Please do not edit it manually. *
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* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines Pb deposition- 2005, 1.8Mtpa scenario}
Concentration(1)/Deposition(0), Emission rate units, Concentration/Deposition
units,Background Concentration, Variable Background flag,Variable Emission
Flag
{False grams/second microgram/m2 0 False False }
```

Terrain influence tag, 0-ignore, 1 - include
{0}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{0}

Total number of sources (Stack + Area + Volume sources)
{30}

Source Group information

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```
{OldPS 1 614980 8184300 36 }
```

Stack height and diameter
{23 3.5 }

Stack temperature, Velocity, Cross, Height

```

{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 3 }
Constant emission rate
{0.0155}
Building width
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building height
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter1
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter2
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter3
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Deposition fraction proportions
{0.9 0.05 0.05 }
Particle sizes
{2.5 6 10 }
Particle densities
{1 1 1 }
Water scavenging
{0 0 0 }
Ice scavenging
{0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT1 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.0014 0 0 0 0.00146 0.00146 0.00146 0 0 0 0.00146
0.00146 0.00146 0 0 0 0.00146 0.00146 0.00146 0 0 0 0.00146 0.00146 0.00146 0
0 0 0.00146 0.00146 0.00146 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {PLANT 2 617625 8182245 36 }
 Source height
 {0 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 4 }
 Wind-stability emission rate
 {0 0 0 0.27 0.27 0.27 0 0 0 0.27 0.27 0.27 0 0 0 0.27 0.27 0.27 0 0 0 0.27 }
 SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
 {5 750 350 19 0 20 0 }
 Base shape point coordinates
 {616125 8182350 }
 Deposition fraction proportions
 {0.15 0.25 0.1 0.5 }
 Particle sizes
 {2.5 6 10 30 }
 Particle densities
 {1 1 1 1 }
 Water scavenging
 {0 0 0 0 }
 Ice scavenging
 {0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {ROMPAD 2 617625 8182245 36 }
 Source height
 {0 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 4 }
 Wind-stability emission rate
 {0 0 0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 0 0 0 0.459 }
 SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
 {5 225 420 17 0 20 0 }
 Base shape point coordinates
 {616725 8182875 }
 Deposition fraction proportions
 {0.15 0.25 0.1 0.5 }
 Particle sizes
 {2.5 6 10 30 }
 Particle densities
 {1 1 1 1 }

```

Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }
Deposition fraction proportions
{0.3 0.3 0.25 0.15 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117
0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117
0.0117 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

```

Deposition fraction proportions

{0.15 0.25 0.1 0.5 }

Particle sizes

{2.5 6 10 30 }

Particle densities

{1 1 1 1 }

Water scavenging

{0 0 0 0 }

Ice scavenging

{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{CONVEY 2 617625 8182245 36 }

Source height

{2 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 4 }

Constant emission rate

{100}

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{5 1.5 190 15 0 20 0 }

Base shape point coordinates

{616472 8183019 }

Deposition fraction proportions

{0.15 0.25 0.1 0.5 }

Particle sizes

{2.5 6 10 30 }

Particle densities

{1 1 1 1 }

Water scavenging

{0 0 0 0 }

Ice scavenging

{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{GL1 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 4 }

Constant emission rate

{128}

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{1 40 300 12 0 20 0 }

Base shape point coordinates
{617057 8182807 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{0.00128}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{0.00079}

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{0.00079}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }

```

```

Constant emission rate
{0.0022}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{0.0022}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 110 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of

```

```

particle fractions
{1 4 }
Constant emission rate
{0.0022}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{0.0022}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }

```

```

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.00146 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014
0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014
0.0014 0.0014 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.00146 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014
0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014
0.0014 0.0014 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }

```

Source height
 {0 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 4 }
 Wind-stability emission rate
 {0 0 0 0.00146 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 }
 SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
 {5 650 302 3 0 20 0 }
 Base shape point coordinates
 {618275 8182547 }
 Deposition fraction proportions
 {0.15 0.25 0.1 0.5 }
 Particle sizes
 {2.5 6 10 30 }
 Particle densities
 {1 1 1 1 }
 Water scavenging
 {0 0 0 0 }
 Ice scavenging
 {0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {TAILS2 2 617625 8182245 36 }
 Source height
 {0 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 4 }
 Wind-stability emission rate
 {0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 }
 SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
 {5 825 600 0 0 20 0 }
 Base shape point coordinates
 {609675 8184150 }
 Deposition fraction proportions
 {0.3 0.3 0.25 0.15 }
 Particle sizes
 {2.5 6 10 30 }
 Particle densities
 {1 1 1 1 }
 Water scavenging
 {0 0 0 0 }

Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS3 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8183550 }
Deposition fraction proportions
{0.3 0.3 0.25 0.15 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }
Deposition fraction proportions
{0.3 0.3 0.25 0.15 }

```

Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117
0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117
0.0117 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117
0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117
0.0117 0.0117 }

```

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8185569 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 4 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117
0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117
0.0117 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 4 }

```

```

Constant emission rate
{100}
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{1000}
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{1200}
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }

```

Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{2000}
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PCRSR 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 4 }
Constant emission rate
{5000}
Deposition fraction proportions
{0.15 0.25 0.1 0.5 }
Particle sizes
{2.5 6 10 30 }
Particle densities
{1 1 1 1 }
Water scavenging
{0 0 0 0 }
Ice scavenging
{0 0 0 0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{SCRSR 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 4 }

Constant emission rate
{20000}

Deposition fraction proportions
{0.15 0.25 0.1 0.5 }

Particle sizes
{2.5 6 10 30 }

Particle densities
{1 1 1 1 }

Water scavenging
{0 0 0 0 }

Ice scavenging
{0 0 0 0 }

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }

X, Y coordinates and Elevation
{617162 8182068 0 }

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

Model settings and parameters
Emission conversion factor, Averaging Time
{0.001 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 0 1 0 0 0 1 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations
{0 0 1 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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 True False True False }

Stability class adjustments (0-None, 1-Urban1, 2-Urban2)
{0}
Building wake algorithms (1-Huber-Sneider, 2-Hybrid, 3-Schulman-Scire)
{3}

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 buyoancy - 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
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Pb deposition.txt'}
Meteorological file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met
File.txt'}
Concentration file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Pb deposition.dat'}

```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines Pb emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {0.0155}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

```

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.0014 0 0 0 0.00146 0.00146 0.00146 0 0 0 0.00146
0.00146 0.00146 0 0 0 0.00146 0.00146 0.00146 0 0 0 0.00146 0.00146 0.00146 0
0 0 0.00146 0.00146 0.00146 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.27 0.27 0.27 0 0 0 0.27 0.27 0.27 0 0 0 0.27 0.27 0.27 0 0 0 0.27
0.27 0.27 0 0 0 0.27 0.27 0.27 0 0 0 0.27 0.27 0.27 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 0 0
0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 0 0 0 0.459 0.459 0.459 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate

```

{100}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1.5 190 15 0 20 0 }
Base shape point coordinates
{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 400 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{128}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 300 12 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions

```

```

{1 0 }
Constant emission rate
{0.00128}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00079}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00079}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

```

stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0.0022}

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{1 40 1400 0 0 20 0 }

Base shape point coordinates

{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{DUMP2 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0.0022}

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{1 40 930 -17 0 20 0 }

Base shape point coordinates

{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{DUMP3 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0.0022}

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{1 40 850 7 0 20 0 }

Base shape point coordinates

{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{DUMP4 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

```

{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0022}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.00146 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014
0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014
0.0014 0.0014 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.00146 0.00146 0.00146 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014
0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014
0.0014 0.0014 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```

```

{PIT4 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.00146 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014
0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014 0.0014 0.0014 0 0 0 0.0014
0.0014 0.0014 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS2 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8184150 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS3 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 }

```

```

0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364
0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364 0.0364 0.0364 0 0 0 0.0364
0.0364 0.0364 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117
0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117
0.0117 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius

```

{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 0.0117 0.0117 0 0 0 0.0117 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{100}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

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

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1200}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{2000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PCRS 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

```

{1 0 }
Constant emission rate
{5000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{SCRS3 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{20000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate

```

{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y coordinates, Receptor height
{1 55 59 0 }

X grid coordinates

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

```

Model settings and parameters
Emission conversion factor, Averaging Time
{1 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
{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options
{0 0 }

Output options (All metadata, Every concentration/deposition, Highest/2nd
highest, 100 worst case table, Save all calculations
{0 0 1 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
rural, 3-ISCST, 4-User Defined
{0 2 }
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 0.2 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 0.6 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)
{1 0 10 60 0.3 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)
{3}

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 buyoancy - 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
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Pb.txt'}

Meteorological file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met
File.txt'}

Receptor file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}

Concentration file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Pb.dat'}

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines PM2.5 emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {277500}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0
0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{PLANT 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0
0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 750 350 19 0 20 0 }

Base shape point coordinates

{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{ROMPAD 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0
0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 0 0 0 0.853 0.853 0.853 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 225 420 17 0 20 0 }

Base shape point coordinates

{616725 8182875 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z

```

coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44
0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

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```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0
0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

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```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{200}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1.5 190 15 0 20 0 }

```

Base shape point coordinates
{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 400 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{1.18}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 300 12 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{1.18}

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.729}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.729}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }

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Constant emission rate
{2}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{2}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{2}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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

```

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particle fractions
{1 0 }
Constant emission rate
{2}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0
0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0
0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }

```

Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 0 0 0 0.138 0.138 0.138 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS2 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }
0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS3 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }
0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

```

{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44
0.44 0.44 0 0 0 0.44 0.44 0.44 0 0 0 0.44 0.44 0.44 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }

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Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0
0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }

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Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0
0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }

```

Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 0 0
0 1.1 1.1 1.1 0 0 0 1.1 1.1 1.1 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{800}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{40000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{410000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{10000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PCRS 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{3000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{SCRS 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{9900}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

```

{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 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
{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options

```

{0 0 }

Output options (All metadata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations

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

{0 2 }

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 0.2 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 0.6 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)

{1 0 10 60 0.3 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)

{3}

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 0.02 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 buyoancy - 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

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\PM25.txt'}

Meteorological file

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met

```
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\PM25.dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines PM10 emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {555000}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0
0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94
2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94
2.94 2.94 0 0 0 2.94 2.94 2.94 0 0 0 2.94 2.94 2.94 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z

```

coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52
1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0
0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{600}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1.5 190 15 0 20 0 }

```

Base shape point coordinates
{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 400 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.1}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 300 12 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.1}

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }

```

```

Constant emission rate
{14}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{14}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{14}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{14}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0
0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0
0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }

```

Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 0 0 0 0.474 0.474 0.474 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS2 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 }
1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS3 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 }
1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

```
{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52 1.52 1.52 0 0 0 1.52
1.52 1.52 0 0 0 1.52 1.52 1.52 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }
```

```
Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0
0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }
```

```
Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0
0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
```

Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 0 0
0 3.8 3.8 3.8 0 0 0 3.8 3.8 3.8 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{2800}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{130000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1430000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{20000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PCRS 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{11000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{SCRS 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{34000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

```

{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 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
{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options

```

{0 0 }

Output options (All metadata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations

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

{0 2 }

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 0.2 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 0.6 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)

{1 0 10 60 0.3 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)

{3}

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 0.02 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 buyoancy - 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

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\PM10.txt'}

Meteorological file

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met

```
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\pm10.dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines SO2 emissions 2005 1.8Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{0 0 0 0 0 0 0 0 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 1 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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
{1 1 2 2 }

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

Enhance plume for buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\SO2(10-min).txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\SO2(10-min).dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines SO2 emissions 2005 1.8Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

```
{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{0.1}
Building width
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building height
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter1
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter2
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
Building BPIP parameter3
{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
```

Receptor information

Discrete receptors

```
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }
```

Gridded receptors

```
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }
```

X grid coordinates

```
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }
```

Y grid coordinates

```
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }
```

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
```

{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations
{0 0 1 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 rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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 buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\S02.txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\S02.dat'}
```

C 55 59 0

607000 607500 608000 608500 609000 609500 610000 610500 611000 611250
611500 611750 612000 612250 612500 612750 613000 613250 613500 613750
614000 614250 614500 614750 615000 615250 615500 615750 616000 616250
616500 616750 617000 617250 617500 617750 618000 618250 618500 618750
619000 619250 619500 619750 620000 620250 620500 620750 621000 621500
622000 622500 623000 623500 624000
8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000

50 45 50 45 50 50 45 47 50 45 40 40 40 45 45 45 45 50
55 55 60 70 80 60 45 50 50 50 50 50 50 50 45 45 50
45 50 50 50 55 80 130 110 90 120 100 70 65 80 90 95 80 70 45
50 50 50 45 50 50 50 47 47 50 50 50 45 40 35 40 40 42
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C 1

614850 8182425 40 0.

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {1100000}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
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 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0
0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88
5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88
5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z

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coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
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Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
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3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

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Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{1200}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1.5 190 15 0 20 0 }

```

Base shape point coordinates
{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 400 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{14.3}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 300 12 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{14.3}

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.8}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.8}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }

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```

Constant emission rate
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
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Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
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```

```

particle fractions
{1 0 }
Constant emission rate
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
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0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0
0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }

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Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS2 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS3 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

```
{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }
```

```
Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }
```

```
Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
```

Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5200}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{70000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{800000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{50000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PCRS 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{114000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{SCRS 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{342000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

```

{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 3 }

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 0 0 0 0 0 0 }

Statistical output options

```

{0 0 }

Output options (All metadata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations

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

{0 2 }

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 0.2 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 0.6 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)

{1 0 10 60 0.3 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)

{3}

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 0.02 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

{1 1 2 2 }

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

{1 1 }

Enhance plume for buyoancy - 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

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TSP(3-min).txt'}

Meteorological file

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met

```
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TSP(3-min).dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines TSP emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {1100000}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0
0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88
5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88
5.88 5.88 0 0 0 5.88 5.88 5.88 0 0 0 5.88 5.88 5.88 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z

```

coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

```

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{1200}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1.5 190 15 0 20 0 }

```

Base shape point coordinates
{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 400 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{14.3}
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{1 40 300 12 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{GL2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{14.3}

```

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.8}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{8.8}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }

```

```

Constant emission rate
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
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
{24}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0
0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0
0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }

```

Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 0 0 0 0.949 0.949 0.949 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS2 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS3 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }
3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 }

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 3.04 3.04 0 0 0 3.04 }
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 }
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 }
SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices
{5 1000 593.8 -15 0 20 0 }

Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59
7.59 7.59 0 0 0 7.59 7.59 7.59 0 0 0 7.59 7.59 7.59 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5200}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{70000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{800000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{50000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PCRS 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{114000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{SCRS 3 616425 8183025 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{342000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

```

{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 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
{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options

```

{0 0 }

Output options (All metadata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations

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

{0 2 }

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 0.2 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 0.6 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)

{1 0 10 60 0.3 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)

{3}

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 0.02 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 buyoancy - 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

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TSP.txt'}

Meteorological file

{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met

```
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TSP.dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines TVOC emissions 2005 1.8 Mtpa}
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
{2}

Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }

Number of source groups
{1}

Total number of sources (Stack + Area + Volume sources)
{1}

Source Group information

Total Number of Sources in Group 1
{1}

Sources in Source Group 1
{OldPS }

BPIP Run (1-True, 0-False)
{-1 }

Total number of buildings
{2 }

Building name, Base elevation, Number of tiers
{Stores 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616530 616693 616702 616539 }

Y coordinates
{8182437 8182480 8182446 8182403 }

Building name, Base elevation, Number of tiers
{OCWS 36 1 }

Height, Number of sides
{20 4 }

X coordinates
{616644 616680 616723 616687 }

Y coordinates
{8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{OldPS 1 614980 8184300 36 }
Stack height and diameter
{23 3.5 }
Stack temperature, Velocity, Cross, Height
{878 16.7 -1 -1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Number of particle fractions
{1 0 }
Constant emission rate
{0.7}
Building width
{0 }
Building height
{0 }
Building BPIP parameter1
{0 }
Building BPIP parameter2
{0 }
Building BPIP parameter3
{0 }

Receptor information

Discrete receptors

Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors

Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates

{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates

{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters

Emission conversion factor, Averaging Time
{1000000 3 }

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 0 0 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 1 1 0 0 }

Write concentration (1=yes, 0=no), Concentration rank, Write frequency, Frequency Level
{1 9 0 -1 }

Disregard exponents (1=yes, 0=no), Exponent Scheme (1-Irvin urban, 2-Irvin rural, 3-ISCST, 4-User Defined
{0 2 }

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 0.2 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 0.6 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)
{1 0 10 60 0.3 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 0.02 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
{1 1 2 2 }

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

Enhance plume for buyoancy - 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

```
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TVOC.txt'}  
Meteorological file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met  
File.txt'}  
Receptor file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}  
Concentration file  
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\TVOC.dat'}
```

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines Zn emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {18.7}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

```

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0
0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0
0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {TAILS1 2 617625 8182245 36 }
 Source height
 {0 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 0 }
 Wind-stability emission rate
 {0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
 SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
 {5 825 600 0 0 20 0 }
 Base shape point coordinates
 {609675 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {WASTE1 2 617625 8182245 36 }
 Source height
 {10 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {4 0 }
 Wind-stability emission rate
 {0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
 SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
 {5 1000 593.8 -15 0 20 0 }
 Base shape point coordinates
 {616350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
 {CONVEY 2 617625 8182245 36 }
 Source height
 {2 0 }
 Source Shape
 {4 }
 Side length, Effective Radius
 {1000 564.189583870097 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
 {1 0 }
 Constant emission rate
 {100}
 SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 1.5 190 15 0 20 0 }

Base shape point coordinates

{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{FWR 2 617625 8182245 36 }

Source height

{2 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0}

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{1 40 400 0 0 20 0 }

Base shape point coordinates

{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{GL1 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0.00841}

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{1 40 300 12 0 20 0 }

Base shape point coordinates

{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{GL2 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

```

{0.00841}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00519}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00519}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions

```

```

{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

```

```

stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height

```

```

{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS2 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS3 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates

```

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{TAILS4 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{610500 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE2 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE3 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate

{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{300}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{7000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{4000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PCRSR 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{12000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{SCRSR 3 616425 8183025 40 }
Source height

{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{40000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius

```

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 3 }

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 0 0 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 1 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
rural, 3-ISCST, 4-User Defined
{0 2 }
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 0.2 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 0.6 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)
{1 0 10 60 0.3 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)
{3}

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 0.02 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
{1 1 2 2 }
Adjust PG curves for roughness - Horizontal, Vertical (1=yes,0-no)
{1 1 }
Enhance plume for buyoancy - 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
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Zn(3-min).txt'}
Meteorological file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met
File.txt'}
Receptor file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}
Concentration file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Zn(3-min).dat'}

5.0 version

```
*****
* 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. *
*
*****
```

Simulation Title

```
{Xstrata McArthur River Mines Zn emissions - 2005, 1.8Mtpa scenario}
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
{2}
```

```
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
```

```
Number of source groups
{6}
```

```
Total number of sources (Stack + Area + Volume sources)
{37}
```

Source Group information

```
Total Number of Sources in Group 1
{37}
```

Sources in Source Group 1

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 WASTE1 TAILS1 PIT1
PIT2 PIT3 PIT4 DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2
PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 2
{1}
```

Sources in Source Group 2

```
{OldPS }
```

```
Total Number of Sources in Group 3
{33}
```

Sources in Source Group 3

```
{PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2 DUMP3
DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1 DRILL
PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2 DMPLD3 }
```

```
Total Number of Sources in Group 4
{34}
```

Sources in Source Group 4

```
{OldPS PLANT ROMPAD CONVEY FWR GL1 GL2 FWR2 ROMRD DUMP1 DUMP2
DUMP3 DUMP4 TAILS2 TAILS3 TAILS4 WASTE2 WASTE3 WASTE4 PIT1 TAILS1 WASTE1
DRILL PITLD1 ROMLD DMPLD1 CRSHLD PCRSR SCRSR PITLD2 PITLD3 PITLD4 DMPLD2
DMPLD3 }
```

```
Total Number of Sources in Group 5
{24}
```

Sources in Source Group 5

```
{PIT1 PLANT ROMPAD TAILS1 WASTE1 CONVEY FWR GL1 GL2 FWR2 ROMRD
DUMP1 DUMP2 DUMP3 DUMP4 PIT2 PIT3 PIT4 TAILS2 TAILS3 TAILS4 WASTE2
```

WASTE3 WASTE4 }
 Total Number of Sources in Group 6
 {12}
 Sources in Source Group 6
 {DRILL PITLD1 ROMLD DMPLD1 CRSHL D PCRSH SCRSH PITLD2 PITLD3 PITLD4 DMPLD2
 DMPLD3 }
 BPIP Run (1-True, 0-False)
 {-1 }
 Total number of buildings
 {2 }
 Building name, Base elevation, Number of tiers
 {Stores 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616530 616693 616702 616539 }
 Y coordinates
 {8182437 8182480 8182446 8182403 }
 Building name, Base elevation, Number of tiers
 {OCWS 36 1 }
 Height, Number of sides
 {20 4 }
 X coordinates
 {616644 616680 616723 616687 }
 Y coordinates
 {8182706 8182717 8182556 8182547 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {OldPS 1 614980 8184300 36 }
 Stack height and diameter
 {23 3.5 }
 Stack temperature, Velocity, Cross, Height
 {878 16.7 -1 -1 }
 Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
 stability, 5-hour and season, 6-temperature), Number of particle fractions
 {1 0 }
 Constant emission rate
 {18.7}
 Building width
 {0 }
 Building height
 {0 }
 Building BPIP parameter1
 {0 }
 Building BPIP parameter2
 {0 }
 Building BPIP parameter3
 {0 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
 coordinates
 {PIT1 2 617625 8182245 0 }
 Source height
 {0 0 }
 Source Shape

```

{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PLANT 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0
0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 750 350 19 0 20 0 }
Base shape point coordinates
{616125 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMPAD 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0
0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 0 0 0 0.613 0.613 0.613 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 225 420 17 0 20 0 }
Base shape point coordinates
{616725 8182875 }

```

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{TAILS1 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{WASTE1 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{CONVEY 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{100}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{5 1.5 190 15 0 20 0 }

Base shape point coordinates

{616472 8183019 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{FWR 2 617625 8182245 36 }

Source height

{2 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0}

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{1 40 400 0 0 20 0 }

Base shape point coordinates

{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{GL1 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

{0.00841}

SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices

{1 40 300 12 0 20 0 }

Base shape point coordinates

{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{GL2 2 617625 8182245 36 }

Source height

{1 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{1 0 }

Constant emission rate

```

{0.00841}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 300 40 -15 0 20 0 }
Base shape point coordinates
{616801 8182708 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{FWR2 2 617625 8182245 36 }
Source height
{2 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00519}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1406 0 0 20 0 }
Base shape point coordinates
{617231 8182645 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{ROMRD 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.00519}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 615 40 16 0 20 0 }
Base shape point coordinates
{617057 8182807 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP1 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions

```

```

{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 1400 0 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP2 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 930 -17 0 20 0 }
Base shape point coordinates
{618300 8182350 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP3 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 40 850 7 0 20 0 }
Base shape point coordinates
{618300 8183250 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DUMP4 2 617625 8182245 36 }
Source height
{1 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and

```

```

stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0.0144}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{1 950 40 -65 0 20 0 }
Base shape point coordinates
{617520 8183700 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT2 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182245 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT3 2 617625 8182245 0 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{617625 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PIT4 2 617625 8182245 0 }
Source height

```

```

{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046
0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046 0.0046 0.0046 0 0 0 0.0046
0.0046 0.0046 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 650 302 3 0 20 0 }
Base shape point coordinates
{618275 8182547 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS2 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates
{609675 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{TAILS3 2 617625 8182245 36 }
Source height
{0 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0
0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 825 600 0 0 20 0 }
Base shape point coordinates

```

{610500 8183550 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{TAILS4 2 617625 8182245 36 }

Source height

{0 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 0 0 0 0.221 0.221 0.221 }

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{5 825 600 0 0 20 0 }

Base shape point coordinates

{610500 8184150 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{WASTE2 2 617625 8182245 36 }

Source height

{10 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }

SigmaZ, XSide, YSide, Angle, Radius, Number of Vertices

{5 1000 593.8 -15 0 20 0 }

Base shape point coordinates

{617350 8184975 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates

{WASTE3 2 617625 8182245 36 }

Source height

{10 0 }

Source Shape

{4 }

Side length, Effective Radius

{1000 564.189583870097 }

Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions

{4 0 }

Wind-stability emission rate

{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{616350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{WASTE4 2 617625 8182245 36 }
Source height
{10 0 }
Source Shape
{4 }
Side length, Effective Radius
{1000 564.189583870097 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{4 0 }
Wind-stability emission rate
{0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0
0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 0 0 0 0.037 0.037 0.037 }
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{5 1000 593.8 -15 0 20 0 }
Base shape point coordinates
{617350 8185569 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DRILL 3 618075 8182500 28 }
Source height
{2 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-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{300}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PITLD1 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates

{ROMLD 3 616875 8183175 37 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{7000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD1 3 617100 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{4000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{CRSHLD 3 616725 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{5000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{PCRSR 3 616650 8183100 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{12000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{SCRSR 3 616425 8183025 40 }
Source height

{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{40000}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD2 3 618080 8182505 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD3 3 618090 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{PITLD4 3 618075 8182555 28 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperature), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{DMPLD2 3 617120 8186250 40 }
Source height
{2 0 }
Side length, Effective Radius

```

{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z
coordinates
{DMPLD3 3 617120 8186275 40 }
Source height
{2 0 }
Side length, Effective Radius
{2 1 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and
stability, 5-hour and season, 6-temperature), Position in Array, Number of
particle fractions
{1 0 }
Constant emission rate
{0}

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 1 }
X, Y coordinates and Elevation
{614850 8182425 0 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y
coordinates, Receptor height
{1 55 59 0 }

X grid coordinates
{607000 607500 608000 608500 609000 609500 610000 610500 611000 611250 611500
611750 612000 612250 612500 612750 613000 613250 613500 613750 614000 614250
614500 614750 615000 615250 615500 615750 616000 616250 616500 616750 617000
617250 617500 617750 618000 618250 618500 618750 619000 619250 619500 619750
620000 620250 620500 620750 621000 621500 622000 622500 623000 623500 624000 }

Y grid coordinates
{8176000 8176500 8177000 8177500 8178000 8178250 8178500 8178750 8179000
8179250 8179500 8179750 8180000 8180250 8180500 8180750 8181000 8181250
8181500 8181750 8182000 8182250 8182500 8182750 8183000 8183250 8183500
8183750 8184000 8184250 8184500 8184750 8185000 8185250 8185500 8185750
8186000 8186250 8186500 8186750 8187000 8187250 8187500 8187750 8188000
8188250 8188500 8188750 8189000 8189250 8189500 8189750 8190000 8190500
8191000 8191500 8192000 8192500 8193000 }

Model settings and parameters
Emission conversion factor, Averaging Time
{1 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
{1 0 0 0 0 0 0 1 0 0 0 1 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd
highest, 100 worst case table, Save all calculations
{0 0 1 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
rural, 3-ISCST, 4-User Defined
{0 2 }
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 0.2 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 0.6 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)
{1 0 10 60 0.3 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)
{3}

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 0.02 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 buyoancy - 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
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Zn.txt'}
Meteorological file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\McArthurRiver Met
File.txt'}
Receptor file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Inputs\terrain.ter'}
Concentration file
{'J:\Jobs\42625552\Air Quality\Modelling 2005\Outputs\Zn.dat'}