

CO STARTING

TITLEONE JHARBANDH STEEL PLANT OF RML
TITLETWO PM10 EMISSIONS FROM ALL STACKS
(Without DGs)
MODELOPT DFAULT CONC RURAL
AVERTIME 24 PERIOD
POLLUTID PM10
RUNORNOT RUN

CO FINISHED

SO STARTING

** S-01 2x500 TPD Kiln WHRB Stack
** S-02 2x600 TPD Kiln WHRB Stack
** S-03 DRI K-1 & K-2 in-plant Dedusting (RMHS)
** S-04 DRI K-1 & K-2 in-plant Dedusting (CDH)
** S-05 DRI K-1 & K-2 in-plant Dedusting (PSB)
** S-06 DRI K-3 & K-4 in-plant Dedusting (RMHS)
** S-07 DRI K-3 & K-4 in-plant Dedusting (CDH)
** S-08 DRI K-3 & K-4 in-plant Dedusting (PSB)
** S-09 ESP-Drying & Preheating in Traveling Grate
** S-10 Raw Material Handling Stack
** S-11 Finished Product Handling Stack
** S-12 Coal Washery in-plant Dedusting
** S-13 Stove Stack
** S-14 Stock House De-dusting
** S-15 Sinter Plant-Main Stack
** S-16 Sinter Plant-De-Dusting
** S-17 Coke Oven Stack
** S-18 2x20T IF Fume Extraction Stack + 20T LRF
** S-19 2x20T IF Fume Extraction Stack + 20T LRF
** S-20 2x20T IF Fume Extraction Stack + 20T LRF
** S-21 1x20T IF Fume Extraction Stack + 20T LRF
** S-22 90T EAF Fume Extraction Stack
** S-23 Reheating Furnace Stack
** S-24 Reheating Furnace Stack
** S-25 Reheating Furnace Stack
** S-26 Reheating Furnace Stack
** S-27 Reheating Furnace Stack
** S-28 Reheating Furnace Stack
** S-29 Coal Handling System for PGP
** S-30 Crushing Section
** S-31 Raw Mill / Kiln
** S-32 Cement Plant Mill
** S-33 Bag Filling / Packing / Product Area
** S-34 2x125 TPH FBB
** S-35 2x250 TPH FBB
** S-36 Power Plant Raw Material in-plant
Dedusting
** S-37 Power Plant Raw Material in-plant
Dedusting
** S-38 BF Gas WHR Boiler
** S-39 Coke Oven Based Gas WHR Boiler
**
** Phase-II
** S-40 2x600 TPD Kiln WHRB Stack
** S-41 DRI K-5 & K-6 in-plant Dedusting (RMHS)
** S-42 DRI K-5 & K-6 in-plant Dedusting (CDH)

** S-43 DRI K-5 & K-6 in-plant Dedusting (PSB)
** S-44 ESP-Drying & Preheating in Traveling Grate
** S-45 Raw Material Handling Stack
** S-46 Finished Product Handling Stack
** S-47 Coal Washery in-plant Dedusting
** S-48 Stove Stack
** S-49 Stock House De-dusting
** S-50 Sinter Plant-Main Stack
** S-51 Sinter Plant-De-Dusting
** S-52 Coke Oven Stack
** S-53 160T EAF Fume Extraction Stack+1x160TLRF
** S-54 Reheating Furnace Stack (0.3 MTPA)
** S-55 Reheating Furnace Stack (0.3 MTPA)
** S-56 Reheating Furnace Stack (0.2 MTPA)
** S-57 Reheating Furnace Stack
** S-58 Reheating Furnace Stack
** S-59 Coal Handling System for PGP
** S-60 Crushing Section
** S-61 Raw Mill / Kiln
** S-62 Cement Plant Mill
** S-63 Bag Filling / Packing / Product Area
** S-64 2x250 TPH FBB
** S-65 Power Plant Raw Material in-plant
Dedusting
** S-66 Power Plant Raw Material in-plant
Dedusting
** S-67 BF Gas WHR Boiler
** S-68 Coke Oven Based Gas WHR Boiler
** AREA SOURCE
** A-1 SOLID WASTE DUMING YARD
** A-2 RM PELLETT PLANT
** A-3 RM PELLETT PLANT
** A-4 SINTER COKE YARD
** A-5 RAW MATERIAL STORAGE
** A-6 RAW MATERIAL STORAGE
** A-7 SOLID WASTE DUMING YARD
** A-8 SPACE FOR COKE OVEN
** A-9 SPACE FOR COKE OVEN
** A-10 BRICK PLANT
** A-11 BRICK PLANT
** A-12 UNCRUSHED LIMESTONE YARD
** A-13 UNCRUSHED LIMESTONE YARD
** A-14 SOLID WASTE
** A-15 WASHERY
** A-16 WASHERY

** LOCATION OF STACKS

SO LOCATION S-01 POINT 10713.0732 10590.3151
SO LOCATION S-02 POINT 10813.0732 10590.3151
SO LOCATION S-03 POINT 10581.2358 10592.3578
SO LOCATION S-04 POINT 10729.0215 10867.1971
SO LOCATION S-05 POINT 10747.967 10867.1971
SO LOCATION S-06 POINT 10572.6013 10649.986
SO LOCATION S-07 POINT 10793.0729 10867.1971
SO LOCATION S-08 POINT 10776.9096 10867.1971
SO LOCATION S-09 POINT 10505.4766 10636.4607
SO LOCATION S-10 POINT 10456.2355 10615.1393

SO LOCATION S-11 POINT 10580.4584 10770.3572
SO LOCATION S-12 POINT 11759.2279 10646.1222
SO LOCATION S-13 POINT 10766.3167 11071.1425
SO LOCATION S-14 POINT 10772.8787 11108.2784
SO LOCATION S-15 POINT 10535.7453 11236.7544
SO LOCATION S-16 POINT 10558.0516 11281.5121
SO LOCATION S-17 POINT 11479.4192 10740.58
SO LOCATION S-18 POINT 11026.6808 10867.1971
SO LOCATION S-19 POINT 11010.5773 10970.2454
SO LOCATION S-20 POINT 11006.2132 11070.8124
SO LOCATION S-21 POINT 11005.3132 11152.1624
SO LOCATION S-22 POINT 10824.6416 11084.9641
SO LOCATION S-23 POINT 11206.4775 10817.7299
SO LOCATION S-24 POINT 11206.4775 10881.8412
SO LOCATION S-25 POINT 11206.4783 10945.9525
SO LOCATION S-26 POINT 11206.479 11010.0638
SO LOCATION S-27 POINT 11206.479 11074.1751
SO LOCATION S-28 POINT 10942.3346 11260.8798
SO LOCATION S-29 POINT 10451.161 10691.7309
SO LOCATION S-30 POINT 11537.5113 11136.3431
SO LOCATION S-31 POINT 11449.2594 11108.8985
SO LOCATION S-32 POINT 11451.6322 11131.8174
SO LOCATION S-33 POINT 11529.9392 11086.3266
SO LOCATION S-34 POINT 11181.6431 10590.3214
SO LOCATION S-35 POINT 11248.085 10590.3151
SO LOCATION S-36 POINT 11152.6272 10633.3039
SO LOCATION S-37 POINT 11219.9493 10633.2977
SO LOCATION S-38 POINT 10753.3217 11025.2705
SO LOCATION S-39 POINT 11490.7942 10754.0946
SO LOCATION S-40 POINT 10960.0732 10590.3151
SO LOCATION S-41 POINT 10933.6899 10932.9838
SO LOCATION S-42 POINT 10941.4693 10867.1971
SO LOCATION S-43 POINT 10993.9381 10867.1971
SO LOCATION S-44 POINT 10505.4766 11006.5371
SO LOCATION S-45 POINT 10456.0172 10840.9014
SO LOCATION S-46 POINT 10580.2401 10872.6929
SO LOCATION S-47 POINT 11758.7239 10907.2319
SO LOCATION S-48 POINT 10766.3167 11259.6539
SO LOCATION S-49 POINT 10772.8787 11296.7898
SO LOCATION S-50 POINT 10558.0516 11295.9063
SO LOCATION S-51 POINT 10535.7453 11340.2434
SO LOCATION S-52 POINT 11479.4192 10872.2807
SO LOCATION S-53 POINT 10824.6416 11273.4755
SO LOCATION S-54 POINT 11206.1516 11322.2431
SO LOCATION S-55 POINT 11206.1516 11260.9319
SO LOCATION S-56 POINT 11206.1516 11202.2516
SO LOCATION S-57 POINT 11206.1516 11138.3093
SO LOCATION S-58 POINT 10944.6201 11322.2431
SO LOCATION S-59 POINT 10451.161 10962.6136
SO LOCATION S-60 POINT 11684.0229 11136.3431
SO LOCATION S-61 POINT 11594.4322 11109.3035
SO LOCATION S-62 POINT 11598.0813 11132.5985
SO LOCATION S-63 POINT 11676.4508 11086.3266
SO LOCATION S-64 POINT 11321.8625 10590.3151
SO LOCATION S-65 POINT 11202.698 10633.4333
SO LOCATION S-66 POINT 11358.4084 10633.3039
SO LOCATION S-67 POINT 10753.3217 11213.7819

SO LOCATION S-68 POINT 11490.7942 10885.7954
SO LOCATION A-1 AREA 10063.4507 10911.3856
SO LOCATION A-2 AREA 10463.5756 10856.1749
SO LOCATION A-3 AREA 10463.5756 10723.0307
SO LOCATION A-4 AREA 10646.9926 11246.3523
SO LOCATION A-5 AREA 10881.3308 10238.6448
SO LOCATION A-6 AREA 11518.3988 10314.7937
SO LOCATION A-7 AREA 11246.0567 10221.9128
SO LOCATION A-8 AREA 11473.0735 10675.7041
SO LOCATION A-9 AREA 11473.0735 10807.4048
SO LOCATION A-10 AREA 11349.7746 10854.7959
SO LOCATION A-11 AREA 11349.7746 11023.3828
SO LOCATION A-12 AREA 11480.0703 11104.8614
SO LOCATION A-13 AREA 11626.5819 11104.8614
SO LOCATION A-14 AREA 11432.4491 11199.1626
SO LOCATION A-15 AREA 11836.6645 10896.965
SO LOCATION A-16 AREA 11836.6561 10637.3319

** Point Source QS HS TS VS DS

** Parameters: ----

SO SRCPARAM S-01 2.604167 80 423 18.13 2.75
SO SRCPARAM S-02 3.020833 80 423 17.67 3
SO SRCPARAM S-03 0.625 35 323 17.38 1.7
SO SRCPARAM S-04 0.338542 30 373 13.97 1.5
SO SRCPARAM S-05 0.625 35 323 17.38 1.7
SO SRCPARAM S-06 0.755208 35 323 18.74 1.8
SO SRCPARAM S-07 0.416667 30 373 17.19 1.5
SO SRCPARAM S-08 0.755208 35 323 18.74 1.8
SO SRCPARAM S-09 2.447917 70 440 16.75 4
SO SRCPARAM S-10 0.338542 30 373 13.97 1.5
SO SRCPARAM S-11 0.169271 30 373 13.97 1.5
SO SRCPARAM S-12 0.46875 35 323 13.04 1.7
SO SRCPARAM S-13 0.25 35 423 13.54 1.8
SO SRCPARAM S-14 0.484375 47 313 11.65 1.8
SO SRCPARAM S-15 9.010417 55 423 18.97 5
SO SRCPARAM S-16 0.833333 45 313 16.23 2
SO SRCPARAM S-17 0.911458 85 493 17.89 2.5
SO SRCPARAM S-18 0.614583 35 373 14.26 2
SO SRCPARAM S-19 0.614583 35 373 14.26 2
SO SRCPARAM S-20 0.614583 35 373 14.26 2
SO SRCPARAM S-21 0.307292 35 373 8.8 1.8
SO SRCPARAM S-22 3.265625 60 403 20.47 4
SO SRCPARAM S-23 0.482813 60 638 8.52 3
SO SRCPARAM S-24 0.482813 60 638 8.52 3
SO SRCPARAM S-25 0.482813 60 638 8.52 3
SO SRCPARAM S-26 0.482813 60 638 8.52 3
SO SRCPARAM S-27 1.088542 80 638 10.8 4
SO SRCPARAM S-28 0.482813 60 638 8.52 3
SO SRCPARAM S-29 0.273175 30 373 6.34 2
SO SRCPARAM S-30 0.817708 30 318 17 2
SO SRCPARAM S-31 3.666667 80 393 20 4
SO SRCPARAM S-32 4.947917 60 336 21 4
SO SRCPARAM S-33 0.15625 35 351 16 1
SO SRCPARAM S-34 1.94375 90 423 9.47 6
SO SRCPARAM S-35 3.8875 110 423 13.92 7
SO SRCPARAM S-36 1.963542 45 323 6.31 5
SO SRCPARAM S-37 3.927083 45 323 12.63 5

: A-121 :

SO SRCPARAM S-38 0.421875 30 423 11.84 2.5
 SO SRCPARAM S-39 0.496875 30 423 13.95 2.5
 SO SRCPARAM S-40 3.020833 80 423 17.67 3
 SO SRCPARAM S-41 0.755208 35 323 18.74 1.8
 SO SRCPARAM S-42 0.416667 30 373 17.19 1.5
 SO SRCPARAM S-43 0.755208 35 323 18.74 1.8
 SO SRCPARAM S-44 2.447917 70 440 16.75 4
 SO SRCPARAM S-45 0.338542 30 373 13.97 1.5
 SO SRCPARAM S-46 0.338542 30 373 13.97 1.5
 SO SRCPARAM S-47 0.272362 35 323 7.58 1.7
 SO SRCPARAM S-48 0.4375 35 423 15.86 2.2
 SO SRCPARAM S-49 0.848958 47 313 13.66 2.2
 SO SRCPARAM S-50 15.458333 80 423 19.26 6.5
 SO SRCPARAM S-51 1.421875 55 313 17.72 2.5
 SO SRCPARAM S-52 1.520833 100 493 18.22 3.2
 SO SRCPARAM S-53 5.807292 70 403 23.3 5
 SO SRCPARAM S-54 0.723958 60 638 8.87 3.6
 SO SRCPARAM S-55 0.723958 60 638 8.87 3.6
 SO SRCPARAM S-56 0.482813 60 638 8.52 3
 SO SRCPARAM S-57 0.96875 80 638 9.61 4
 SO SRCPARAM S-58 0.482813 60 638 8.52 3
 SO SRCPARAM S-59 0.273175 30 373 6.34 2
 SO SRCPARAM S-60 0.697917 30 318 17 2
 SO SRCPARAM S-61 3.125 80 393 20 4
 SO SRCPARAM S-62 4.213542 60 336 21 4
 SO SRCPARAM S-63 0.130208 35 351 16 1
 SO SRCPARAM S-64 3.8875 110 423 13.92 7
 SO SRCPARAM S-65 1.3125 45 323 5.21 4.5
 SO SRCPARAM S-66 2.619792 45 323 8.42 5
 SO SRCPARAM S-67 0.767188 30 423 14.96 3
 SO SRCPARAM S-68 0.853125 30 423 16.63 3
 SO SRCPARAM A-1 2.5640528333008E-10 1 40.459
 56.8455 126 4
 SO SRCPARAM A-2 4.00421385612246E-10 1
 25.7166 63.5122 0 4
 SO SRCPARAM A-3 4.00421385612246E-10 1
 25.7166 63.5122 0 4
 SO SRCPARAM A-4 1.23347962213335E-09 1
 73.3624 128.3222 0 4
 SO SRCPARAM A-5 5.76122005771976E-09 1
 637.068 202.9619 0 4
 SO SRCPARAM A-6 5.76122005771976E-09 1
 82.5805 126.813 0 4
 SO SRCPARAM A-7 2.5640528333008E-10 1
 154.2384 72.7122 137 4
 SO SRCPARAM A-8 1.23347962213335E-09 1
 63.8352 23.5821 0 4
 SO SRCPARAM A-9 1.23347962213335E-09 1
 63.8352 23.5821 0 4
 SO SRCPARAM A-10 3.66945930822826E-11 1
 67.3527 158.2784 0 4
 SO SRCPARAM A-11 3.66945930822826E-11 1
 67.3527 158.2784 0 4
 SO SRCPARAM A-12 9.95974048176298E-09 1
 62.9988 28.395 0 4
 SO SRCPARAM A-13 9.95974048176298E-09 1
 62.9988 28.395 0 4

SO SRCPARAM A-14 2.5640528333008E-10 1
 502.2029 177.7935 0 4
 SO SRCPARAM A-15 2.4177171847153E-09 1
 35.6592 259.6545 0 4
 SO SRCPARAM A-16 2.4177171847153E-09 1
 35.6592 259.6545 0 4
 SO SRCGROUP ALL
 SO FINISHED
 RE STARTING
 GRIDPOLR POL1 STA
 GRIDPOLR POL1 ORIG 11328 10978
 GRIDPOLR POL1 DIST 1500 2000 2500 3000 3500
 4000 5000 7000 10000
 GRIDPOLR POL1 GDIR 16 0 22.5
 GRIDPOLR POL1 END
 DISCCART 11858.33 11508.33
 DISCCART 11615.01 11670.91
 DISCCART 11328.00 11728.00
 DISCCART 11040.99 11670.91
 DISCCART 11328.00 9978.00
 DISCCART 11710.68 10054.12
 DISCCART 12035.11 10270.89
 DISCCART 12251.88 10595.32
 DISCCART 12328.00 10978.00
 DISCCART 12035.11 11685.11
 DISCCART 11710.68 11901.88
 DISCCART 11328.00 11978.00
 DISCCART 10945.32 11901.88
 DISCCART 10620.89 11685.11
 DISCCART 10404.12 11360.68
 DISCCART 10620.89 10270.89
 DISCCART 10945.32 10054.12
 DISCCART 11363.31 10816.9
 DISCCART 14662.73 11118.76
 DISCCART 10876.32 17523.53
 DISCCART 11444.70 12436.35
 DISCCART 13292.04 12707.34
 DISCCART 11423.82 9111.708
 DISCCART 8484.586 9517.753
 DISCCART 9118.692 16434.20
 RE FINISHED
 ME STARTING
 INPUTFIL JHARBAND.MET
 ANEMHGHT 5.0
 SURFDATA 99999 2018 XXX
 UAIRDATA 99999 2018 XXX
 WDRotate 180
 ME FINISHED
 OU STARTING
 OU RECTABLE 24 FIRST
 OU MAXTABLE 24 50
 OU PLOTFILE 24 ALL FIRST JBPM10.PLT
 OU FINISHED

 *** SETUP Finishes Successfully ***

*** POINT SOURCE DATA ***

SOURCE	NO.	EMISSION	RATE					BASE	STACK	STACK	STACK	STACK	BUILDING
ID	CATS.	PM10	PM2.5	SO2	NO2	(M)	(M)	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIA.	EXISTS
S-01	0	2.60E+00	1.50E+00	2.98E+01	8.92E-02	10713.1	10590.3	0	80	423	18.13	2.75	NO
S-02	0	3.02E+00	1.74E+00	3.58E+01	1.07E-01	10813.1	10590.3	0	80	423	17.67	3	NO
S-03	0	6.25E-01	3.59E-01			10581.2	10592.4	0	35	323	17.38	1.7	NO
S-04	0	3.39E-01	1.95E-01			10729	10867.2	0	30	373	13.97	1.5	NO
S-05	0	6.25E-01	3.59E-01			10748	10867.2	0	35	323	17.38	1.7	NO
S-06	0	7.55E-01	4.34E-01			10572.6	10650	0	35	323	18.74	1.8	NO
S-07	0	4.17E-01	2.40E-01			10793.1	10867.2	0	30	373	17.19	1.5	NO
S-08	0	7.55E-01	4.34E-01			10776.9	10867.2	0	35	323	18.74	1.8	NO
S-09	0	2.45E+00	1.41E+00	5.45E+00	8.01E-02	10505.5	10636.5	0	70	440	16.75	4	NO
S-10	0	3.39E-01	1.95E-01			10456.2	10615.1	0	30	373	13.97	1.5	NO
S-11	0	1.69E-01	9.73E-02			10580.5	10770.4	0	30	373	13.97	1.5	NO
S-12	0	4.69E-01	2.70E-01			11759.2	10646.1	0	35	323	13.04	1.7	NO
S-13	0	2.50E-01	1.44E-01	4.44E+00	3.33E+00	10766.3	11071.1	0	35	423	13.54	1.8	NO
S-14	0	4.84E-01	2.79E-01			10772.9	11108.3	0	47	313	11.65	1.8	NO
S-15	0	9.01E+00	5.18E+00	3.82E+00	2.23E-02	10535.7	11236.8	0	55	423	18.97	5	NO
S-16	0	8.33E-01	4.79E-01			10558.1	11281.5	0	45	313	16.23	2	NO
S-17	0	9.11E-01	5.24E-01			11479.4	10740.6	0	85	493	17.89	2.5	NO
S-18	0	6.15E-01	3.53E-01			11026.7	10867.2	0	35	373	14.26	2	NO
S-19	0	6.15E-01	3.53E-01			11010.6	10970.2	0	35	373	14.26	2	NO
S-20	0	6.15E-01	3.53E-01			11006.2	11070.8	0	35	373	14.26	2	NO
S-21	0	3.07E-01	1.77E-01			11005.3	11152.2	0	35	373	8.8	1.8	NO
S-22	0	3.27E+00	1.88E+00			10824.6	11085	0	60	403	20.47	4	NO
S-23	0	4.83E-01	2.78E-01	6.58E+00	3.89E+00	11206.5	10817.7	0	60	638	8.52	3	NO
S-24	0	4.83E-01	2.78E-01	6.58E+00	3.89E+00	11206.5	10881.8	0	60	638	8.52	3	NO
S-25	0	4.83E-01	2.78E-01	6.58E+00	3.89E+00	11206.5	10946	0	60	638	8.52	3	NO
S-26	0	4.83E-01	2.78E-01	6.58E+00	3.89E+00	11206.5	11010.1	0	60	638	8.52	3	NO
S-27	0	1.09E+00	6.26E-01	1.06E+01	6.25E+00	11206.5	11074.2	0	80	638	10.8	4	NO
S-28	0	4.83E-01	2.78E-01	4.27E+00	2.78E+00	10942.3	11260.9	0	60	638	8.52	3	NO
S-29	0	2.73E-01	1.57E-01			10451.2	10691.7	0	30	373	6.34	2	NO
S-30	0	8.18E-01	4.70E-01			11537.5	11136.3	0	30	318	17	2	NO
S-31	0	3.67E+00	2.11E+00	8.21E-01	1.31E+00	11449.3	11108.9	0	80	393	20	4	NO
S-32	0	4.95E+00	2.85E+00			11451.6	11131.8	0	60	336	21	4	NO
S-33	0	1.56E-01	8.98E-02			11529.9	11086.3	0	35	351	16	1	NO
S-34	0	1.94E+00	1.12E+00	1.73E+01	1.73E+01	11181.6	10590.3	0	90	423	9.47	6	NO
S-35	0	3.89E+00	2.24E+00	3.46E+01	3.46E+01	11248.1	10590.3	0	110	423	13.92	7	NO
S-36	0	1.96E+00	1.13E+00			11152.6	10633.3	0	45	323	6.31	5	NO
S-37	0	3.93E+00	2.26E+00			11219.9	10633.3	0	45	323	12.63	5	NO
S-38	0	4.22E-01	2.43E-01			10753.3	11025.3	0	30	423	11.84	2.5	NO
S-39	0	4.97E-01	2.86E-01	2.10E+00	1.08E+00	11490.8	10754.1	0	30	423	13.95	2.5	NO
S-40	0	3.02E+00	1.74E+00	3.58E+01	1.07E-01	10960.1	10590.3	0	80	423	17.67	3	NO
S-41	0	7.55E-01	4.34E-01			10933.7	10933	0	35	323	18.74	1.8	NO
S-42	0	4.17E-01	2.40E-01			10941.5	10867.2	0	30	373	17.19	1.5	NO
S-43	0	7.55E-01	4.34E-01			10993.9	10867.2	0	35	323	18.74	1.8	NO
S-44	0	2.45E+00	1.41E+00	5.45E+00	8.01E-02	10505.5	11006.5	0	70	440	16.75	4	NO
S-45	0	3.39E-01	1.95E-01			10456	10840.9	0	30	373	13.97	1.5	NO
S-46	0	3.39E-01	1.95E-01			10580.2	10872.7	0	30	373	13.97	1.5	NO
S-47	0	2.72E-01	1.57E-01			11758.7	10907.2	0	35	323	7.58	1.7	NO
S-48	0	4.38E-01	2.52E-01	7.78E+00	5.83E+00	10766.3	11259.7	0	35	423	15.86	2.2	NO
S-49	0	8.49E-01	4.88E-01			10772.9	11296.8	0	47	313	13.66	2.2	NO

: A-122 :

S-50	0	1.55E+01	8.89E+00	6.57E+00	3.84E-02	10558.1	11295.9	0	80	423	19.26	6.5	NO
S-51	0	1.42E+00	8.18E-01			10535.7	11340.2	0	55	313	17.72	2.5	NO
S-52	0	1.52E+00	8.74E-01			11479.4	10872.3	0	100	493	18.22	3.2	NO
S-53	0	5.81E+00	3.34E+00			10824.6	11273.5	0	70	403	23.3	5	NO
S-54	0	7.24E-01	4.16E-01	6.58E+00	3.89E+00	11206.2	11322.2	0	60	638	8.87	3.6	NO
S-55	0	7.24E-01	4.16E-01	6.58E+00	3.89E+00	11206.2	11260.9	0	60	638	8.87	3.6	NO
S-56	0	4.83E-01	2.78E-01	6.58E+00	3.89E+00	11206.2	11202.3	0	60	638	8.52	3	NO
S-57	0	9.69E-01	5.57E-01	1.06E+01	5.56E+00	11206.2	11138.3	0	80	638	9.61	4	NO
S-58	0	4.83E-01	2.78E-01	4.27E+00	2.78E+00	10944.6	11322.2	0	60	638	8.52	3	NO
S-59	0	2.73E-01	1.57E-01			10451.2	10962.6	0	30	373	6.34	2	NO
S-60	0	6.98E-01	4.01E-01			11684	11136.3	0	30	318	17	2	NO
S-61	0	3.13E+00	1.80E+00	4.90E-01	7.83E-01	11594.4	11109.3	0	80	393	20	4	NO
S-62	0	4.21E+00	2.42E+00			11598.1	11132.6	0	60	336	21	4	NO
S-63	0	1.30E-01	7.49E-02			11676.5	11086.3	0	35	351	16	1	NO
S-64	0	3.89E+00	2.24E+00	3.46E+01	3.46E+01	11321.9	10590.3	0	110	423	13.92	7	NO
S-65	0	1.31E+00	7.55E-01			11292.7	10633.4	0	45	323	5.21	4.5	NO
S-66	0	2.62E+00	1.51E+00			11358.4	10633.3	0	45	323	8.42	5	NO
S-67	0	7.67E-01	4.41E-01		1.31E+00	10753.3	11213.8	0	30	423	14.96	3	NO
S-68	0	8.53E-01	4.91E-01	3.50E+00	1.81E+00	11490.8	10885.8	0	30	423	16.63	3	NO

*** GRIDDED RECEPTOR NETWORK SUMMARY ***
 *** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***
 *** ORIGIN FOR POLAR NETWORK ***
 X-ORIG = 11328.00 ; Y-ORIG = 10978.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***
 (METERS)

1500.0, 2000.0, 2500.0, 3000.0, 3500.0, 4000.0, 5000.0, 7000.0,
 10000.0,

*** DIRECTION RADIALS OF NETWORK ***
 (DEGREES)

360.0, 22.5, 45.0, 67.5, 90.0, 112.5, 135.0, 157.5, 180.0,
 202.5,
 225.0, 247.5, 270.0, 292.5, 315.0, 337.5,

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

(11858.3, 11508.3, .0, .0); (11615.0, 11670.9, .0, .0);
 (11328.0, 11728.0, .0, .0); (11041.0, 11670.9, .0, .0);
 (11328.0, 9978.0, .0, .0); (11710.7, 10054.1, .0, .0);
 (12035.1, 10270.9, .0, .0); (12251.9, 10595.3, .0, .0);
 (12328.0, 10978.0, .0, .0); (12035.1, 11685.1, .0, .0);
 (11710.7, 11901.9, .0, .0); (11328.0, 11978.0, .0, .0);
 (10945.3, 11901.9, .0, .0); (10620.9, 11685.1, .0, .0);
 (10404.1, 11360.7, .0, .0); (10620.9, 10270.9, .0, .0);
 (10945.3, 10054.1, .0, .0); (11363.3, 10816.9, .0, .0);
 (14662.7, 11118.8, .0, .0); (10876.3, 17523.5, .0, .0);
 (11444.7, 12436.3, .0, .0); (13292.0, 12707.3, .0, .0);
 (11423.8, 9111.7, .0, .0); (8484.6, 9517.8, .0, .0);
 (9118.7, 16434.2, .0, .0);

*** AREA SOURCE DATA ***

SOURCE	NO.	EMISSION RATE		COORD (SW CORNER)		BASE ELEV.	RELEASE HEIGHT	X-DIM OF AREA	Y-DIM OF AREA	ORIENT. OF AREA	INIT. SZ
		PM10 (GRAMS/SEC)	PM2.5 (GRAMS/SEC)	X (M)	Y (M)						
A-1	0	2.56E-10	1.47E-10	10063.5	10911.4	0	1	40.46	56.85	126	4
A-2	0	4.00E-10	2.30E-10	10463.6	10856.2	0	1	25.72	63.51	0	4
A-3	0	4.00E-10	2.30E-10	10463.6	10723	0	1	25.72	63.51	0	4
A-4	0	1.23E-09	7.09E-10	10647	11246.4	0	1	73.36	128.32	0	4
A-5	0	5.76E-09	3.31E-09	10881.3	10238.6	0	1	637.07	202.96	0	4
A-6	0	5.76E-09	3.31E-09	11518.4	10314.8	0	1	82.58	126.81	0	4
A-7	0	2.56E-10	1.47E-10	11246.1	10221.9	0	1	154.24	72.71	137	4
A-8	0	1.23E-09	7.09E-10	11473.1	10675.7	0	1	63.84	23.58	0	4
A-9	0	1.23E-09	7.09E-10	11473.1	10807.4	0	1	63.84	23.58	0	4
A-10	0	3.67E-11	2.11E-11	11349.8	10854.6	0	1	67.35	158.28	0	4
A-11	0	3.67E-11	2.11E-11	11349.8	11023.4	0	1	67.35	158.28	0	4
A-12	0	9.96E-09	5.73E-09	11480.1	11104.9	0	1	63	28.39	0	4
A-13	0	9.96E-09	5.73E-09	11626.6	11104.9	0	1	63	28.39	0	4
A-14	0	2.56E-10	1.47E-10	11432.4	11199.2	0	1	502.2	177.79	0	4
A-15	0	2.42E-09	1.39E-09	11836.7	10897	0	1	35.66	259.65	0	4
A-16	0	2.42E-09	1.39E-09	11836.7	10637.3	0	1	35.66	259.65	0	4

: A-123 :

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: JHARBAND.MET FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,F9.4,f10.1,f8.4,i4,f7.2)
 SURFACE STATION NO.: 99999 UPPER AIR STATION NO.: 99999
 NAME: XXX NAME: XXX
 YEAR: 2018 YEAR: 2018

YEAR	MONTH	DAY	FLOW	SPEED	TEMP	STAB	MIXING HEIGHT (M)	USTAR	M-O	LENGTH	Z-0	IPCODE	PRATE
			VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN	(M/S)	(M)	(M)	(mm/HR)	
18	3	1	1	187.8	3.70	296.1	4	228.0	228.0	.0000	.0	.0000	0 .00
18	3	1	2	282.1	2.80	296.1	5	218.0	218.0	.0000	.0	.0000	0 .00
18	3	1	3	271.0	1.50	295.6	6	200.0	200.0	.0000	.0	.0000	0 .00
18	3	1	4	245.3	1.40	296.0	6	180.0	180.0	.0000	.0	.0000	0 .00
18	3	1	5	241.4	2.10	295.4	5	153.0	153.0	.0000	.0	.0000	0 .00
18	3	1	6	264.2	1.40	296.0	1	85.0	85.0	.0000	.0	.0000	0 .00
18	3	1	7	232.8	.90	296.6	1	105.0	105.0	.0000	.0	.0000	0 .00
18	3	1	8	307.7	.30	297.5	1	313.0	313.0	.0000	.0	.0000	0 .00
18	3	1	9	247.3	.20	297.9	1	563.0	563.0	.0000	.0	.0000	0 .00
18	3	1	10	226.7	.50	301.1	1	868.0	868.0	.0000	.0	.0000	0 .00
18	3	1	11	178.4	.80	303.5	1	1200.0	1200.0	.0000	.0	.0000	0 .00
18	3	1	12	282.3	.20	304.8	1	1625.0	1625.0	.0000	.0	.0000	0 .00
18	3	1	13	269.4	3.70	305.6	2	1675.0	1675.0	.0000	.0	.0000	0 .00
18	3	1	14	248.4	1.70	304.9	1	1900.0	1900.0	.0000	.0	.0000	0 .00
18	3	1	15	253.2	1.40	306.7	1	1700.0	1700.0	.0000	.0	.0000	0 .00
18	3	1	16	257.2	.50	305.0	1	1525.0	1525.0	.0000	.0	.0000	0 .00
18	3	1	17	303.1	2.10	305.2	2	1375.0	1375.0	.0000	.0	.0000	0 .00
18	3	1	18	233.5	5.70	305.0	3	1075.0	1075.0	.0000	.0	.0000	0 .00
18	3	1	19	303.2	4.10	303.6	2	825.0	825.0	.0000	.0	.0000	0 .00
18	3	1	20	259.0	3.30	301.0	4	598.0	598.0	.0000	.0	.0000	0 .00
18	3	1	21	251.0	3.10	300.6	4	498.0	498.0	.0000	.0	.0000	0 .00
18	3	1	22	243.1	3.00	298.4	4	423.0	423.0	.0000	.0	.0000	0 .00
18	3	1	23	266.2	2.40	298.3	5	358.0	358.0	.0000	.0	.0000	0 .00
18	3	1	24	286.4	.00	296.2	6	285.0	285.0	.0000	.0	.0000	0 .00

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

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 *** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***
 ** CONC OF PM10 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES)	DISTANCE (METERS)					
	1500.00	2000.00	2500.00	3000.00	3500.00	
360.0 |	15.99403 (18042624)	13.90767 (18042624)	11.95857 (18052524)	10.88187 (18052524)	10.01932 (18052524)	
22.5 |	13.38606 (18050324)	11.46323 (18050324)	9.99518 (18050324)	9.23743 (18041424)	8.67725 (18041424)	
45.0 |	14.03870 (18051724)	11.89577 (18051724)	10.54727 (18051724)	9.48200 (18051724)	8.59806 (18051724)	
67.5 |	14.32305 (18041624)	13.52184 (18041624)	12.81659 (18041624)	12.12147 (18041624)	11.51849 (18041624)	
90.0 |	14.16934 (18052724)	11.02968 (18052724)	9.37661 (18052724)	8.12675 (18052724)	7.15617 (18052724)	
112.5 |	14.54039 (18040824)	13.01177 (18040824)	11.29215 (18040824)	9.82858 (18040824)	8.63162 (18040824)	
135.0 |	17.31853 (18040824)	13.45008 (18040824)	10.50988 (18033124)	8.71990 (18033124)	7.34358 (18033124)	
157.5 |	14.93335 (18041524)	12.77797 (18041524)	10.59809 (18041524)	8.76085 (18041524)	7.29463 (18041524)	
180.0 |	18.69343 (18052824)	17.58850 (18052824)	15.79735 (18052824)	13.66120 (18052824)	11.55991 (18052824)	
202.5 |	14.60609 (18052824)	11.07039 (18052824)	8.62599 (18052824)	5.96501 (18052824)	4.41192c (18031124)	
225.0 |	10.10810 (18052924)	8.77364 (18052924)	7.78369 (18052924)	6.95960 (18052924)	6.26782 (18052924)	
247.5 |	18.50775 (18052924)	12.83138 (18052924)	9.97336 (18052924)	7.93585 (18052924)	6.47997 (18052924)	
270.0 |	17.36380c (18051924)	12.13734 (18031024)	9.80313 (18031024)	8.02088c (18032324)	6.80200c (18032324)	
292.5 |	24.90173c (18051924)	18.87398c (18051924)	16.44366c (18051924)	14.57866c (18051924)	13.07745c (18051924)	
315.0 |	27.00479 (18053024)	22.47624 (18053024)	19.27273 (18053024)	15.85682 (18053024)	13.32568 (18053024)	
337.5 |	18.85866 (18042624)	16.41291 (18052324)	14.75609 (18053024)	13.65311 (18053024)	12.67274 (18053024)	

DIRECTION | (DEGREES)	DISTANCE (METERS)				
	4000.00	5000.00	7000.00	10000.00	
360.0 |	9.35291 (18052524)	8.46158 (18052524)	7.73531 (18052524)	7.19080 (18052524)	
22.5 |	8.23857 (18041424)	7.55738 (18041424)	6.39899 (18041424)	5.00588 (18041424)	
45.0 |	7.85062 (18051724)	6.69850 (18051724)	5.24656 (18051724)	3.98804 (18051724)	
67.5 |	10.99899 (18041624)	10.12154 (18041624)	8.79091 (18041624)	7.38622 (18041624)	
90.0 |	6.39605 (18052724)	5.31104c (18051024)	4.30595c (18051024)	3.58104 (18040824)	
112.5 |	7.65952 (18040824)	6.20358 (18040824)	4.28804 (18040824)	2.65767 (18040824)	
135.0 |	6.29128 (18033124)	4.85201 (18033124)	3.48001 (18040824)	2.60768 (18040824)	
157.5 |	6.14309 (18041524)	4.52453 (18041524)	2.82732 (18041524)	1.82983 (18041524)	
180.0 |	9.70728 (18052824)	6.89614 (18052824)	3.85102 (18052824)	2.12334 (18052824)	
202.5 |	3.54591c (18031124)	2.57579 (18031324)	2.01124 (18031824)	1.97974 (18031824)	
225.0 |	5.68866 (18052924)	4.79196 (18052924)	3.63753 (18052924)	2.67257 (18052924)	
247.5 |	5.42854 (18052924)	3.99729 (18052924)	2.78533 (18031624)	1.99495 (18031624)	
270.0 |	5.81901c (18032324)	4.36819c (18032324)	3.10049 (18052924)	2.20024 (18052924)	
292.5 |	11.86991c (18051924)	10.10856c (18051924)	8.09122c (18051924)	6.49561c (18051924)	
315.0 |	11.57586 (18053024)	9.21969 (18053024)	8.41282 (18052024)	7.44691 (18052024)	
337.5 |	11.81329 (18053024)	10.39895 (18053024)	8.43060 (18053024)	6.61639 (18053024)	

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
11858.33	11508.33	16.83937	(18051724)	11615.01	11670.91	14.99239	(18051224)
11328.00	11728.00	15.59160	(18052324)	11040.99	11670.91	19.50309	(18052324)
11328.00	9978.00	17.22152	(18041524)	11710.68	10054.12	15.39006	(18033124)
12035.11	10270.89	20.60353	(18040824)	12251.88	10595.32	18.43585	(18052724)
12328.00	10978.00	19.17352	(18052724)	12035.11	11685.11	16.78227	(18051724)
11710.68	11901.88	14.83468	(18051224)	11328.00	11978.00	16.22869	(18052324)
10945.32	11901.88	20.12596	(18052324)	10620.89	11685.11	28.48208	(18053024)
10404.12	11360.68	27.56269	(18052024)	10620.89	10270.89	12.51187	(18052924)
10945.32	10054.12	14.26435	(18052824)	11363.31	10816.90	14.22084	(18052724)
14662.73	11118.76	7.01931	(18052724)	10876.32	17523.53	7.92289	(18052524)
11444.70	12436.35	15.65586	(18050324)	13292.04	12707.34	10.71121	(18051724)
11423.82	9111.71	17.15381	(18052824)	8484.59	9517.75	9.53859	(18052924)
9118.69	16434.20	9.18169	(18053024)				

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***							
RANK	CONC	(YYMMDDHH)	AT RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH)	AT RECEPTOR (XR,YR) OF TYPE
1.	28.48208	(18053024)	AT (10620.89, 11685.11) DC	26.	18.67740	(18052324)	AT (10753.97, 12363.82) GP
2.	27.61744	(18052424)	AT (10620.89, 11685.11) DC	27.	18.50775	(18052924)	AT (9942.18, 10403.97) GP
3.	27.56269	(18052024)	AT (10404.12, 11360.68) DC	28.	18.43585	(18052724)	AT (12251.88, 10595.32) DC
4.	27.00479	(18053024)	AT (10267.34, 12038.66) GP	29.	18.41258	(18042624)	AT (10620.89, 11685.11) DC
5.	26.08369	(18052324)	AT (10620.89, 11685.11) DC	30.	18.27847	(18052524)	AT (10945.32, 11901.88) DC
6.	24.90173c	(18051924)	AT (9942.18, 11552.03) GP	31.	18.15844c	(18051824)	AT (10620.89, 11685.11) DC
7.	24.79078c	(18051924)	AT (10404.12, 11360.68) DC	32.	17.97668	(18052424)	AT (10945.32, 11901.88) DC
8.	24.03678	(18052424)	AT (10267.34, 12038.66) GP	33.	17.83794	(18051424)	AT (10620.89, 11685.11) DC
9.	22.75770	(18052424)	AT (10404.12, 11360.68) DC	34.	17.79541	(18052424)	AT (9913.79, 12392.21) GP
10.	22.69836	(18053024)	AT (10404.12, 11360.68) DC	35.	17.74799	(18051324)	AT (11040.99, 11670.91) DC
11.	22.47624	(18053024)	AT (9913.79, 12392.21) GP	36.	17.71979	(18052324)	AT (10267.34, 12038.66) GP
12.	22.46533	(18052024)	AT (9942.18, 11552.03) GP	37.	17.65543	(18053024)	AT (10945.32, 11901.88) DC
13.	20.72207c	(18033024)	AT (10404.12, 11360.68) DC	38.	17.58850	(18052824)	AT (11328.00, 8978.00) GP
14.	20.60353	(18040824)	AT (12035.11, 10270.89) DC	39.	17.52215	(18042624)	AT (11040.99, 11670.91) DC
15.	20.47696c	(18033024)	AT (9942.18, 11552.03) GP	40.	17.42842	(18051624)	AT (11040.99, 11670.91) DC
16.	20.12596	(18052324)	AT (10945.32, 11901.88) DC	41.	17.36524	(18042724)	AT (10945.32, 11901.88) DC
17.	20.10881c	(18051824)	AT (10404.12, 11360.68) DC	42.	17.36380c	(18051924)	AT (9828.00, 10978.00) GP
18.	19.50309	(18052324)	AT (11040.99, 11670.91) DC	43.	17.31853	(18040824)	AT (12388.66, 9917.34) GP
19.	19.28044	(18052524)	AT (11040.99, 11670.91) DC	44.	17.22772	(18052424)	AT (11040.99, 11670.91) DC
20.	19.27705	(18042624)	AT (10945.32, 11901.88) DC	45.	17.22152	(18041524)	AT (11328.00, 9978.00) DC
21.	19.27273	(18053024)	AT (9560.23, 12745.77) GP	46.	17.15381	(18052824)	AT (11423.82, 9111.71) DC
22.	19.17352	(18052724)	AT (12328.00, 10978.00) DC	47.	17.04776	(18053024)	AT (10753.97, 12363.82) GP
23.	18.87398c	(18051924)	AT (9480.24, 11743.37) GP	48.	16.92528	(18051324)	AT (10945.32, 11901.88) DC
24.	18.85866	(18042624)	AT (10753.97, 12363.82) GP	49.	16.92077	(18052524)	AT (10620.89, 11685.11) DC
25.	18.69343	(18052824)	AT (11328.00, 9478.00) GP	50.	16.91120	(18052024)	AT (9480.24, 11743.37) GP

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

DIRECTION (DEGREES)	** CONC OF PM2.5 IN MICROGRAMS/M**3				** DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00	4000.00	5000.00	7000.00	10000.00
360.0	9.19656 (18042624)	7.99691 (18042624)	6.87618 (18052524)	6.25707 (18052524)	5.76112 (18052524)				
22.5	7.69698 (18050324)	6.59136 (18050324)	5.74723 (18050324)	5.31153 (18041424)	4.98942 (18041424)				
45.0	8.07225 (18051724)	6.84007 (18051724)	6.06468 (18051724)	5.45214 (18051724)	4.94388 (18051724)				
67.5	8.23575 (18041624)	7.77506 (18041624)	7.36954 (18041624)	6.96984 (18041624)	6.62313 (18041624)				
90.0	8.14737 (18052724)	6.34206 (18052724)	5.39155 (18052724)	4.67288 (18052724)	4.11480 (18052724)				
112.5	8.36072 (18040824)	7.48176 (18040824)	6.49298 (18040824)	5.65143 (18040824)	4.96318 (18040824)				
135.0	9.95816 (18040824)	7.73380 (18040824)	6.04318 (18033124)	5.01394 (18033124)	4.22256 (18033124)				
157.5	8.58668 (18041524)	7.34733 (18041524)	6.09391 (18041524)	5.03750 (18041524)	4.19442 (18041524)				
180.0	10.74872 (18052824)	10.11339 (18052824)	9.08347 (18052824)	7.85519 (18052824)	6.64695 (18052824)				
202.5	8.39850 (18052824)	6.36547 (18052824)	4.95995 (18052824)	3.42988 (18052824)	2.53686c (18031124)				
225.0	5.81216 (18052924)	5.04485 (18052924)	4.47563 (18052924)	4.00177 (18052924)	3.60400 (18052924)				
247.5	10.64196 (18052924)	7.37804 (18052924)	5.73469 (18052924)	4.56312 (18052924)	3.72598 (18052924)				
270.0	9.98418c (18051924)	6.97897 (18031024)	5.63680 (18031024)	4.61201c (18032324)	3.91115c (18032324)				
292.5	14.31851c (18051924)	10.85254c (18051924)	9.45511c (18051924)	8.38272c (18051924)	7.51954c (18051924)				
315.0	15.52776 (18053024)	12.92384 (18053024)	11.08183 (18053024)	9.11766 (18053024)	7.66227 (18053024)				
337.5	10.84373 (18042624)	9.43742 (18052324)	8.48475 (18053024)	7.85054 (18053024)	7.28682 (18053024)				

DIRECTION (DEGREES)	** DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0	5.37793 (18052524)	4.86541 (18052524)	4.44781 (18052524)	4.13470 (18052524)
22.5	4.73718 (18041424)	4.34550 (18041424)	3.67942 (18041424)	2.87838 (18041424)
45.0	4.51410 (18051724)	3.85163 (18051724)	3.01677 (18051724)	2.29312 (18051724)
67.5	6.32442 (18041624)	5.81989 (18041624)	5.05477 (18041624)	4.24708 (18041624)
90.0	3.67773 (18052724)	3.05385c (18051024)	2.47592c (18051024)	2.05910 (18040824)
112.5	4.40422 (18040824)	3.56706 (18040824)	2.46562 (18040824)	1.52816 (18040824)
135.0	3.61748 (18033124)	2.78991 (18033124)	2.00100 (18040824)	1.49942 (18040824)
157.5	3.53227 (18041524)	2.60161 (18041524)	1.62571 (18041524)	1.05215 (18041524)
180.0	5.58169 (18052824)	3.96528 (18052824)	2.21433 (18052824)	1.22092 (18052824)
202.5	2.03890c (18031124)	1.48108 (18031324)	1.15647 (18031824)	1.13835 (18031824)
225.0	3.27098 (18052924)	2.75538 (18052924)	2.09158 (18052924)	1.53673 (18052924)
247.5	3.12141 (18052924)	2.29844 (18052924)	1.60156 (18031624)	1.14709 (18031624)
270.0	3.34592c (18032324)	2.51171c (18032324)	1.78278 (18052924)	1.26514 (18052924)
292.5	6.82520c (18051924)	5.81243c (18051924)	4.65245c (18051924)	3.73498c (18051924)
315.0	6.65612 (18053024)	5.30132 (18053024)	4.83738 (18052024)	4.28197 (18052024)
337.5	6.79264 (18053024)	5.97939 (18053024)	4.84760 (18053024)	3.80442 (18053024)

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
11858.33	11508.33	9.68264	(18051724)	11615.01	11670.91	8.62063	(18051224)
11328.00	11728.00	8.96517	(18052324)	11040.99	11670.91	11.21428	(18052324)
11328.00	9978.00	9.90238	(18041524)	11710.68	10054.12	8.84929	(18033124)
12035.11	10270.89	11.84703	(18040824)	12251.88	10595.32	10.60062	(18052724)
12328.00	10978.00	11.02477	(18052724)	12035.11	11685.11	9.64981	(18051724)
11710.68	11901.88	8.52995	(18051224)	11328.00	11978.00	9.33150	(18052324)
10945.32	11901.88	11.57244	(18052324)	10620.89	11685.11	16.37718	(18053024)
10404.12	11360.68	15.84856	(18052024)	10620.89	10270.89	7.19432	(18052924)
10945.32	10054.12	8.20200	(18052824)	11363.31	10816.90	8.17698	(18052724)
14662.73	11118.76	4.03611	(18052724)	10876.32	17523.53	4.55566	(18052524)
11444.70	12436.35	9.00213	(18050324)	13292.04	12707.34	6.15895	(18051724)
11423.82	9111.71	9.86343	(18052824)	8484.59	9517.75	5.48468	(18052924)
9118.69	16434.20	5.27947	(18053024)				

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION				VALUES FOR SOURCE GROUP: ALL ***									
RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE		
1.	16.37718	(18053024)	AT	(10620.89,	11685.11)	DC	26.	10.73951	(18052324)	AT	(10753.97,	12363.82)	GP
2.	15.88001	(18052424)	AT	(10620.89,	11685.11)	DC	27.	10.64196	(18052924)	AT	(9942.18,	10403.97)	GP
3.	15.84856	(18052024)	AT	(10404.12,	11360.68)	DC	28.	10.60062	(18052724)	AT	(12251.88,	10595.32)	DC
4.	15.52776	(18053024)	AT	(10267.34,	12038.66)	GP	29.	10.58723	(18042624)	AT	(10620.89,	11685.11)	DC
5.	14.99814	(18052324)	AT	(10620.89,	11685.11)	DC	30.	10.51012	(18052524)	AT	(10945.32,	11901.88)	DC
6.	14.31851c	(18051924)	AT	(9942.18,	11552.03)	GP	31.	10.44111c	(18051824)	AT	(10620.89,	11685.11)	DC
7.	14.25471c	(18051924)	AT	(10404.12,	11360.68)	DC	32.	10.33659	(18052424)	AT	(10945.32,	11901.88)	DC
8.	13.82115	(18052424)	AT	(10267.34,	12038.66)	GP	33.	10.25681	(18051424)	AT	(10620.89,	11685.11)	DC
9.	13.08567	(18052424)	AT	(10404.12,	11360.68)	DC	34.	10.23235	(18052424)	AT	(9913.79,	12392.21)	GP
10.	13.05155	(18053024)	AT	(10404.12,	11360.68)	DC	35.	10.20509	(18051324)	AT	(11040.99,	11670.91)	DC
11.	12.92384	(18053024)	AT	(9913.79,	12392.21)	GP	36.	10.18889	(18052324)	AT	(10267.34,	12038.66)	GP
12.	12.91758	(18052024)	AT	(9942.18,	11552.03)	GP	37.	10.15187	(18053024)	AT	(10945.32,	11901.88)	DC
13.	11.91519c	(18033024)	AT	(10404.12,	11360.68)	DC	38.	10.11339	(18052824)	AT	(11328.00,	8978.00)	GP
14.	11.84703	(18040824)	AT	(12035.11,	10270.89)	DC	39.	10.07523	(18042624)	AT	(11040.99,	11670.91)	DC
15.	11.77425c	(18033024)	AT	(9942.18,	11552.03)	GP	40.	10.02135	(18051624)	AT	(11040.99,	11670.91)	DC
16.	11.57244	(18052324)	AT	(10945.32,	11901.88)	DC	41.	9.98500	(18042724)	AT	(10945.32,	11901.88)	DC
17.	11.56257c	(18051824)	AT	(10404.12,	11360.68)	DC	42.	9.98418c	(18051924)	AT	(9828.00,	10978.00)	GP
18.	11.21428	(18052324)	AT	(11040.99,	11670.91)	DC	43.	9.95816	(18040824)	AT	(12388.66,	9917.34)	GP
19.	11.08625	(18052524)	AT	(11040.99,	11670.91)	DC	44.	9.90593	(18052424)	AT	(11040.99,	11670.91)	DC
20.	11.08430	(18042624)	AT	(10945.32,	11901.88)	DC	45.	9.90238	(18041524)	AT	(11328.00,	9978.00)	DC
21.	11.08183	(18053024)	AT	(9560.23,	12745.77)	GP	46.	9.86343	(18052824)	AT	(11423.82,	9111.71)	DC
22.	11.02477	(18052724)	AT	(12328.00,	10978.00)	DC	47.	9.80247	(18053024)	AT	(10753.97,	12363.82)	GP
23.	10.85254c	(18051924)	AT	(9480.24,	11743.37)	GP	48.	9.73203	(18051324)	AT	(10945.32,	11901.88)	DC
24.	10.84373	(18042624)	AT	(10753.97,	12363.82)	GP	49.	9.72944	(18052524)	AT	(10620.89,	11685.11)	DC
25.	10.74872	(18052824)	AT	(11328.00,	9478.00)	GP	50.	9.72394	(18052024)	AT	(9480.24,	11743.37)	GP

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

**** CONC OF SO2 IN MICROGRAMS/M**3**

DIRECTION | (DEGREES)	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	44.94995 (18052524)	39.31181 (18052524)	33.93221 (18052524)	29.59097 (18052524)	26.17490 (18052524)
22.5 |	19.18659 (18051324)	17.11419 (18050324)	17.59015 (18050324)	17.12714 (18050324)	16.23013 (18050324)
45.0 |	28.63955 (18051724)	23.90138 (18051724)	20.15777 (18051724)	17.39447 (18051724)	15.40453 (18051724)
67.5 |	20.98410 (18051724)	17.05698 (18051724)	15.29722 (18042924)	13.96885 (18042924)	12.69147 (18042924)
90.0 |	25.81455 (18052724)	22.00986 (18052724)	19.16097 (18052724)	16.92472 (18052724)	15.13654 (18052724)
112.5 |	27.84181 (18052724)	22.15756 (18052724)	19.19489 (18040824)	18.14501 (18040824)	16.67939 (18040824)
135.0 |	29.27934 (18040824)	28.79593 (18033124)	25.63853 (18033124)	22.01106 (18033124)	18.75399 (18033124)
157.5 |	25.62780 (18041524)	26.08051 (18041524)	23.63597 (18041524)	20.27300 (18041524)	17.03933 (18041524)
180.0 |	27.67085 (18041524)	35.44770 (18052824)	36.65749 (18052824)	32.80997 (18052824)	27.70745 (18052824)
202.5 |	24.94731c (18031124)	26.32629c (18031124)	21.50053c (18031124)	16.67800c (18031124)	12.95003c (18031124)
225.0 |	16.74180 (18052924)	17.34027 (18052924)	14.37312 (18052924)	12.44524 (18052924)	11.10751 (18052924)
247.5 |	38.42125 (18052924)	31.82242 (18052924)	23.35013 (18052924)	18.24683 (18052924)	14.72207 (18052924)
270.0 |	33.47938c (18051924)	25.49922c (18051924)	22.55830 (18031024)	18.90408 (18031024)	15.63321 (18052924)
292.5 |	46.97657 (18052024)	40.35759 (18052024)	33.70881c (18051924)	29.27438c (18051924)	25.52908c (18051924)
315.0 |	54.95135 (18052424)	41.74947 (18052424)	33.92931 (18053024)	29.01877 (18053024)	25.61826 (18053024)
337.5 |	48.09781 (18052324)	39.04016 (18042624)	34.67172 (18052424)	31.37185 (18052424)	28.42000 (18052424)

DIRECTION | (DEGREES)	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	23.48707 (18052524)	19.68535 (18052524)	15.76713 (18052524)	12.90320 (18052524)
22.5 |	15.23074 (18050324)	13.39696 (18050324)	10.85079 (18041424)	8.53171 (18041424)
45.0 |	13.93757 (18051724)	11.93324 (18051724)	9.66357 (18051724)	7.76048 (18051724)
67.5 |	11.56748 (18042924)	9.77663 (18042924)	8.88965 (18041624)	8.03697 (18041624)
90.0 |	13.68075 (18052724)	11.46306 (18052724)	8.64715 (18052724)	6.54209c (18051024)
112.5 |	15.11201 (18040824)	12.23000 (18040824)	8.20933 (18040824)	5.31459 (18041624)
135.0 |	16.07508 (18033124)	12.25755 (18033124)	8.27123 (18033124)	5.82699 (18033124)
157.5 |	14.27212 (18041524)	10.18565 (18041724)	6.23086 (18041724)	4.32286 (18030824)
180.0 |	22.97452 (18052824)	15.89399 (18052824)	8.65681 (18052824)	4.86167 (18052824)
202.5 |	10.22622c (18031124)	7.56950 (18031324)	4.93056 (18031324)	3.39635 (18031824)
225.0 |	10.11961 (18052924)	8.75204 (18052924)	7.13538 (18052924)	5.69321 (18052924)
247.5 |	12.14414 (18052924)	8.67829 (18052924)	5.29481 (18052224)	3.89404 (18052224)
270.0 |	13.93145 (18052924)	11.41492 (18052924)	8.37995 (18052924)	6.00547 (18052924)
292.5 |	22.56648c (18051924)	18.56470c (18051924)	14.56333c (18051924)	11.60245c (18051924)
315.0 |	23.08694 (18053024)	19.31510 (18053024)	14.22499 (18053024)	10.92407 (18052024)
337.5 |	25.85710 (18052424)	21.76189 (18052424)	16.41020 (18052424)	12.36235 (18053024)

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
11858.33	11508.33	32.64151	(18051724)	11615.01	11670.91	24.01098	(18051724)
11328.00	11728.00	27.23082	(18051624)	11040.99	11670.91	36.98997	(18052524)
11328.00	9978.00	18.64984	(18041524)	11710.68	10054.12	22.09480c	(18030524)
12035.11	10270.89	23.49191	(18033124)	12251.88	10595.32	33.93368	(18052724)
12328.00	10978.00	29.70417	(18052724)	12035.11	11685.11	33.51749	(18051724)
11710.68	11901.88	23.19256	(18051724)	11328.00	11978.00	38.34644	(18052524)
10945.32	11901.88	47.68003	(18052524)	10620.89	11685.11	48.29853	(18052324)
10404.12	11360.68	33.07510	(18052024)	10620.89	10270.89	8.32496	(18031324)
10945.32	10054.12	12.05763	(18052824)	11363.31	10816.90	7.77595	(18053124)
14662.73	11118.76	14.39714	(18052724)	10876.32	17523.53	16.78613	(18052524)
11444.70	12436.35	39.98004	(18052524)	13292.04	12707.34	21.07717	(18051724)
11423.82	9111.71	29.86088	(18052824)	8484.59	9517.75	16.04600	(18052924)
9118.69	16434.20	18.65019	(18052424)				

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***			
RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	54.95135	(18052424) AT (	10267.34, 12038.66) GP
2.	54.79979	(18053024) AT (	10267.34, 12038.66) GP
3.	48.29853	(18052324) AT (	10620.89, 11685.11) DC
4.	48.26149	(18053024) AT (	10620.89, 11685.11) DC
5.	48.09781	(18052324) AT (	10753.97, 12363.82) GP
6.	47.68003	(18052524) AT (	10945.32, 11901.88) DC
7.	46.99707	(18052424) AT (	10620.89, 11685.11) DC
8.	46.97657	(18052024) AT (	9942.18, 11552.03) GP
9.	44.94995	(18052524) AT (	11328.00, 12478.00) GP
10.	43.19208	(18052324) AT (	10945.32, 11901.88) DC
11.	43.06141c	(18051924) AT (	9942.18, 11552.03) GP
12.	42.17750	(18052524) AT (	10753.97, 12363.82) GP
13.	41.74947	(18052424) AT (	9913.79, 12392.21) GP
14.	41.55567	(18053024) AT (	9913.79, 12392.21) GP
15.	41.44004	(18052424) AT (	10753.97, 12363.82) GP
16.	40.75832	(18053024) AT (	10753.97, 12363.82) GP
17.	40.35759	(18052024) AT (	9480.24, 11743.37) GP
18.	40.05323	(18051624) AT (	10945.32, 11901.88) DC
19.	39.98004	(18052524) AT (	11444.70, 12436.35) DC
20.	39.31181	(18052524) AT (	11328.00, 12978.00) GP
21.	39.04016	(18042624) AT (	10562.63, 12825.76) GP
22.	38.60602	(18051524) AT (	10945.32, 11901.88) DC
23.	38.44236c	(18051924) AT (	9480.24, 11743.37) GP
24.	38.42125	(18052924) AT (	9942.18, 10403.97) GP
25.	38.38377	(18052324) AT (	10562.63, 12825.76) GP

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

**** CONC OF NO2 IN MICROGRAMS/M**3**

DIRECTION | (DEGREES)	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	19.89927 (18052524)	16.92594 (18052524)	14.31620 (18052524)	12.31309 (18052524)	10.79272 (18052524)
22.5 |	9.20126 (18051324)	8.08740 (18051324)	8.14485 (18050324)	7.95816 (18050324)	7.48487 (18050324)
45.0 |	11.36404 (18051724)	9.71647 (18051724)	8.25782 (18051724)	7.14000 (18051724)	6.32725 (18051724)
67.5 |	7.71554 (18051724)	6.86546 (18051724)	6.87458 (18042924)	6.54509 (18042924)	6.05958 (18042924)
90.0 |	10.99233 (18052724)	9.29247 (18052724)	8.02685 (18052724)	7.06520 (18052724)	6.31012 (18052724)
112.5 |	10.30751 (18052724)	9.75580 (18040824)	9.25634 (18040824)	8.69608 (18040824)	8.03509 (18040824)
135.0 |	12.29214 (18033124)	11.87091 (18033124)	10.90290 (18033124)	9.67172 (18033124)	8.44118 (18033124)
157.5 |	10.87203 (18041524)	10.69329 (18041524)	9.84050 (18041524)	8.66119 (18041524)	7.43016 (18041524)
180.0 |	12.79014 (18052824)	13.82485 (18052824)	13.02077 (18052824)	11.58079 (18052824)	10.02027 (18052824)
202.5 |	7.56668c (18031124)	6.39609c (18031124)	5.12877 (18031324)	4.50689 (18031324)	3.96111 (18031324)
225.0 |	5.86120 (18031524)	5.17348 (18031524)	4.29621 (18031524)	3.58194 (18031524)	3.02204 (18031524)
247.5 |	14.73865 (18052924)	12.17339 (18052924)	9.71634 (18052924)	7.93630 (18052924)	6.57006 (18052924)
270.0 |	16.68818 (18052924)	11.98242 (18052924)	9.89175 (18031024)	8.25976 (18052924)	7.21739 (18052924)
292.5 |	20.84864c (18051924)	16.09836c (18051924)	13.10480c (18051924)	11.26395c (18051924)	9.91230c (18051924)
315.0 |	23.18461 (18053024)	16.79858 (18053024)	13.53869 (18053024)	11.49517 (18053024)	9.97391 (18053024)
337.5 |	22.36751 (18052424)	19.56847 (18052424)	17.15463 (18052424)	15.15764 (18052424)	13.47841 (18052424)

DIRECTION | (DEGREES)	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	9.63036 (18052524)	8.06340 (18052524)	6.67376 (18052524)	5.66195 (18052524)
22.5 |	6.94816 (18050324)	5.98469 (18050324)	5.12033 (18041424)	4.14876 (18041424)
45.0 |	5.72701 (18051724)	4.89164 (18051724)	3.91795 (18051724)	3.11281 (18051724)
67.5 |	5.55561 (18042924)	4.66161 (18042924)	4.28541 (18041624)	3.89308 (18041624)
90.0 |	5.70169 (18052724)	4.78156 (18052724)	3.61805 (18052724)	2.65405 (18052724)
112.5 |	7.32103 (18040824)	5.95017 (18040824)	3.96091 (18040824)	2.45535 (18040824)
135.0 |	7.35770 (18033124)	5.72389 (18033124)	3.91359 (18033124)	2.74857 (18033124)
157.5 |	6.30966 (18041524)	4.70974 (18041724)	3.03935 (18030824)	2.10040 (18030824)
180.0 |	8.50238 (18052824)	6.32257 (18052824)	3.78018 (18052824)	2.29122 (18052824)
202.5 |	3.50624 (18031324)	2.79288 (18031324)	1.91679 (18031324)	1.49572 (18031824)
225.0 |	2.67876 (18052924)	2.37025 (18052924)	1.95518 (18052924)	1.56500 (18052924)
247.5 |	5.48231 (18052924)	3.90836 (18052924)	2.27284 (18052924)	1.58762 (18052224)
270.0 |	6.41073 (18052924)	5.24234 (18052924)	3.85069 (18052924)	2.76404 (18052924)
292.5 |	8.86511c (18051924)	7.37133c (18051924)	5.68247c (18051924)	4.40700c (18051924)
315.0 |	8.78848 (18053024)	7.31656 (18052024)	6.42544 (18052024)	5.54692 (18052024)
337.5 |	12.08296 (18052424)	9.95114 (18052424)	7.31538 (18052424)	5.59917 (18053024)

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
11858.33	11508.33	9.55398	(18051724)	11615.01	11670.91	9.07626	(18051724)
11328.00	11728.00	10.41411	(18051624)	11040.99	11670.91	11.56739	(18051524)
11328.00	9978.00	8.02445	(18052824)	11710.68	10054.12	9.82010	(18041524)
12035.11	10270.89	11.63332	(18033124)	12251.88	10595.32	9.73187c	(18031924)
12328.00	10978.00	12.07794	(18052724)	12035.11	11685.11	12.09359	(18051724)
11710.68	11901.88	10.84027	(18051724)	11328.00	11978.00	15.57846	(18052524)
10945.32	11901.88	17.37929	(18051524)	10620.89	11685.11	16.82131	(18052424)
10404.12	11360.68	18.48525	(18052024)	10620.89	10270.89	5.61992	(18031324)
10945.32	10054.12	8.95182	(18052824)	11363.31	10816.90	5.17461	(18040824)
14662.73	11118.76	5.89809	(18052724)	10876.32	17523.53	6.91842	(18052524)
11444.70	12436.35	18.44089	(18052524)	13292.04	12707.34	8.46213	(18051724)
11423.82	9111.71	14.05494	(18052824)	8484.59	9517.75	6.77334	(18052924)
9118.69	16434.20	8.45741	(18052424)				

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION				VALUES FOR SOURCE GROUP: ALL ***			
RANK	CONC	(YYMMDDHH)	AT	RANK	CONC	(YYMMDDHH)	AT
1.	23.18461	(18053024)	AT (	26.	15.56689	(18052224)	AT (
2.	22.36751	(18052424)	AT (	27.	15.44230	(18051624)	AT (
3.	21.15153	(18052324)	AT (	28.	15.29657	(18042624)	AT (
4.	20.97265	(18053024)	AT (	29.	15.26009c	(18051824)	AT (
5.	20.84864c	(18051924)	AT (	30.	15.25815	(18042624)	AT (
6.	20.79238	(18052024)	AT (	31.	15.21440	(18051524)	AT (
7.	20.29680	(18052424)	AT (	32.	15.15764	(18052424)	AT (
8.	19.89927	(18052524)	AT (	33.	15.00993	(18052524)	AT (
9.	19.56847	(18052424)	AT (	34.	14.99143	(18053024)	AT (
10.	18.48525	(18052024)	AT (	35.	14.73865	(18052924)	AT (
11.	18.44089	(18052524)	AT (	36.	14.64950	(18042724)	AT (
12.	18.22069c	(18033024)	AT (	37.	14.50439	(18052024)	AT (
13.	17.37929	(18051524)	AT (	38.	14.48770c	(18033024)	AT (
14.	17.15463	(18052424)	AT (	39.	14.44209	(18051624)	AT (
15.	17.07304	(18053024)	AT (	40.	14.33582	(18053024)	AT (
16.	16.92594	(18052524)	AT (	41.	14.31620	(18052524)	AT (
17.	16.82131	(18052424)	AT (	42.	14.17863	(18052324)	AT (
18.	16.79858	(18053024)	AT (	43.	14.15073	(18052524)	AT (
19.	16.68818	(18052924)	AT (	44.	14.12685	(18051224)	AT (
20.	16.51346	(18053024)	AT (	45.	14.09857	(18051224)	AT (
21.	16.36567	(18052324)	AT (	46.	14.09706	(18051424)	AT (
22.	16.09836c	(18051924)	AT (	47.	14.05494	(18052824)	AT (
23.	15.90200	(18052324)	AT (	48.	13.88432	(18052024)	AT (
24.	15.59112	(18052424)	AT (	49.	13.84059	(18052324)	AT (
25.	15.57846	(18052524)	AT (	50.	13.82485	(18052824)	AT (

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

*** Message Summary : ISCST3 Model Execution ***

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

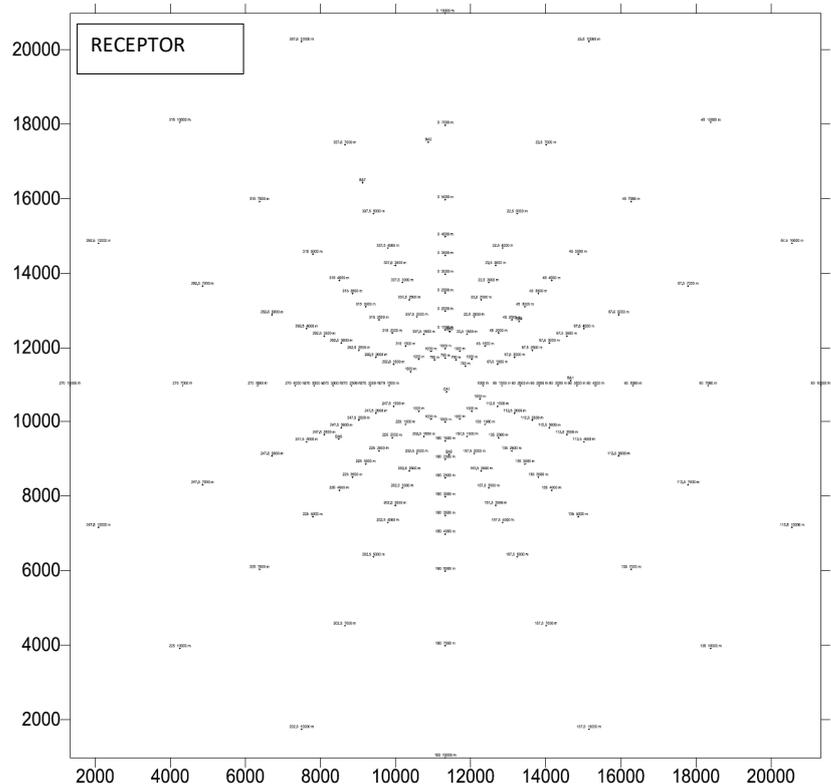
A Total of 0 Fatal Error Message(s)
 A Total of 0 Warning Message(s)
 A Total of 29 Informational Message(s)

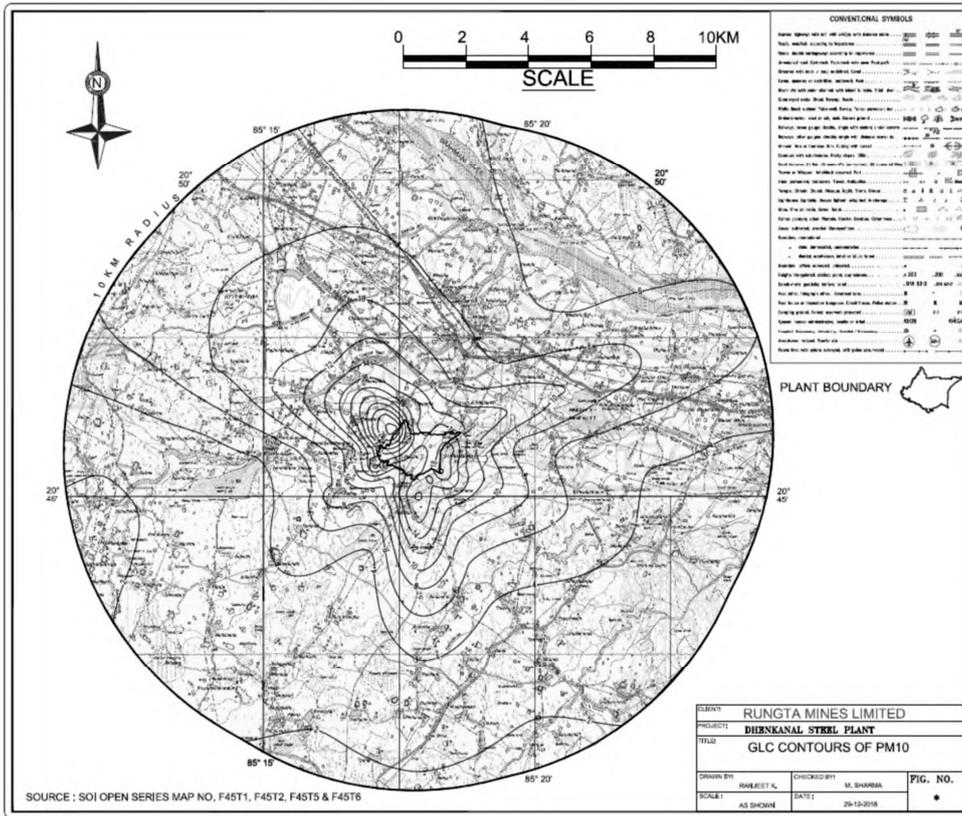
A Total of 29 Calm Hours Identified

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

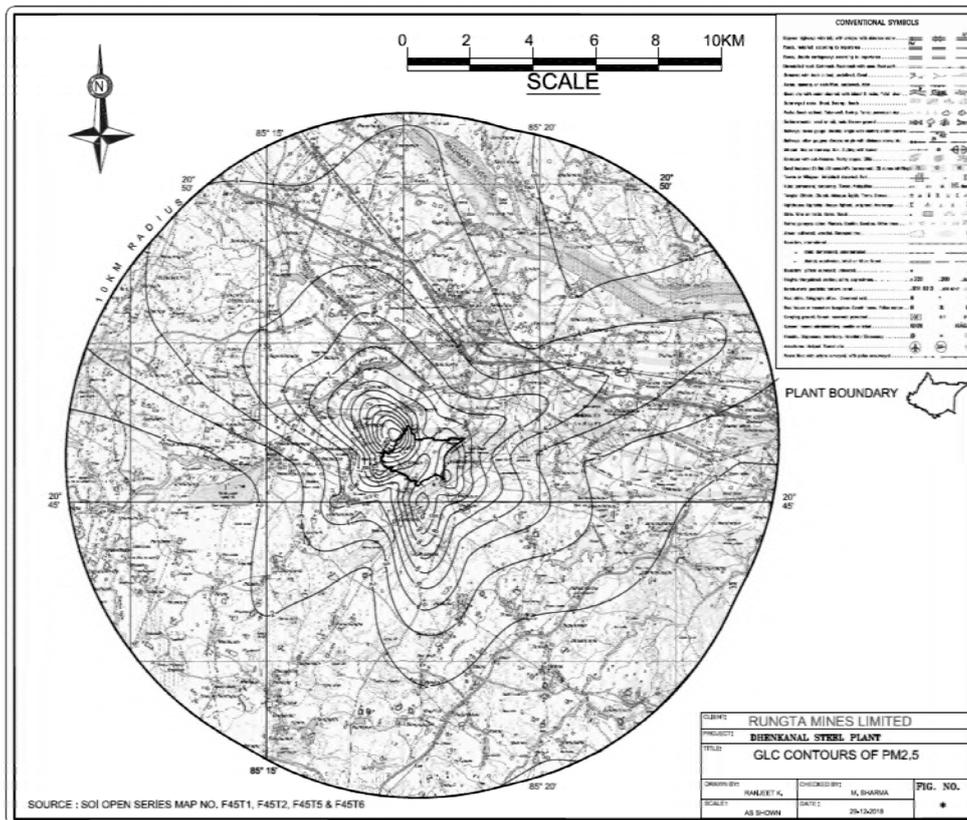
***** WARNING MESSAGES *****
 *** NONE ***

 *** ISCST3 Finishes Successfully ***





ISCST3 Model for Ph-I of 2.85 MTPA Dhenkanal Steel Plant, Odisha of RML



ISCST3 Model for Ph-I of 2.85 MTPA Dhenkanal Steel Plant, Odisha of RML

ANNEXURE : XXIII

ANNEXURE : XXIII CONTD.

RESULTANT AND INCREMENTAL GLC IN CASE DG SET OPERATES INSTEAD OF CPP

Pollutant	Resultant GLC for 2.85 MTPA with CPP	Incremental GLC of only CPP	Incremental GLC of only DG set	Resultant GLC of 2.85 MTPA with DG
(a)	(b)	(c)	(d)	(e)= (b)-(c)+(d)
PM10	99.49	8.59	1.67	92.57
PM2.5	59.08	4.94	0.962	55.102
SO2	71.05	7.83	15.14	78.36
NO2	44.88	7.83	86.93	123.98

The ISCST3 models for the CPP and DG sets are given below:

ISCST3 FOR CAPTIVE POWER PLANT ONLY

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CO STARTING                               GRIDPOLR POL1 GDIR 16 0 22.5
TITLEONE JHARBANDH STEEL PLANT OF RML     GRIDPOLR POL1 END
TITLETWO PM10 EMISSIONS FROM CPP ONLY     DISCCART 11858.33 11508.33
MODELOPT DFAULT CONC RURAL                DISCCART 11615.01 11670.91
AVERTIME 24 PERIOD                        DISCCART 11328.00 11728.00
POLLUTID PM10                             DISCCART 11040.99 11670.91
RUNORNOT RUN                              DISCCART 11328.00 9978.00
                                           DISCCART 11710.68 10054.12
                                           DISCCART 12035.11 10270.89
SO STARTING                               DISCCART 12251.88 10595.32
** S-34 2x125 TPH FBB                     DISCCART 12328.00 10978.00
** S-35 2x250 TPH FBB                     DISCCART 12035.11 11685.11
** S-36 Power Plant Raw Material in-plant  DISCCART 11710.68 11901.88
Dedusting
** S-37 Power Plant Raw Material in-plant  DISCCART 11328.00 11978.00
Dedusting
**
** Phase-II                               DISCCART 10945.32 11901.88
** S-64 2x250 TPH FBB                     DISCCART 10620.89 11685.11
** S-65 Power Plant Raw Material in-plant  DISCCART 10404.12 11360.68
Dedusting
** S-66 Power Plant Raw Material in-plant  DISCCART 10620.89 10270.89
Dedusting
**
** LOCATION OF STACKS
SO LOCATION S-34 POINT 11181.6431 10590.3214
SO LOCATION S-35 POINT 11248.085 10590.3151
SO LOCATION S-36 POINT 11152.6272 10633.3039
SO LOCATION S-37 POINT 11219.9493 10633.2977
SO LOCATION S-64 POINT 11321.8625 10590.3151
SO LOCATION S-65 POINT 11292.698 10633.4333
SO LOCATION S-66 POINT 11358.4084 10633.3039

RE FINISHED
ME STARTING
INPUTFIL JHARBANDH.MET
ANEMHGHT 5.0
SURFDATA 99999 2018 XXX
UAI RDATA 99999 2018 XXX
WDROTATE 180
ME FINISHED
OU STARTING
OU RECTABLE 24 FIRST
OU MAXTABLE 24 50
OU PLOTFILE 24 ALL FIRST JBCPM10.PLT

OU FINISHED
*****
*** SETUP Finishes Successfully ***
*****
    
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*** POINT SOURCE DATA ***

NUMBER EMISSION RATE		BASE	STACK	STACK	STACK	STACK
BUILDING EMISSION RATE		ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER
SOURCE	PART. (GRAMS/SEC)	X	Y	(METERS)	(METERS)	(METERS)
EXISTS	SCALAR VARY	(METERS)				
ID	CATS.	(METERS)	(METERS)	(METERS)	(M/SEC)	(METERS) BY
S-34	0 .19437E+01	11181.6	10590.3	.0	90.00	423.00 9.47 6.00 NO
S-35	0 .38875E+01	11248.1	10590.3	.0	110.00	423.00 13.92 7.00 NO
S-36	0 .19635E+01	11152.6	10633.3	.0	45.00	323.00 6.31 5.00 NO
S-37	0 .39271E+01	11219.9	10633.3	.0	45.00	323.00 12.63 5.00 NO
S-64	0 .38875E+01	11321.9	10590.3	.0	110.00	423.00 13.92 7.00 NO
S-65	0 .13125E+01	11292.7	10633.4	.0	45.00	323.00 5.21 4.50 NO
S-66	0 .26198E+01	11358.4	10633.3	.0	45.00	323.00 8.42 5.00 NO

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***
 *** ORIGIN FOR POLAR NETWORK ***
 X-ORIG = 11328.00 ; Y-ORIG = 10978.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***

(METERS)	2000.0,	2500.0,	3000.0,	3500.0,	4000.0,	5000.0,	7000.0,	10000.0,
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*** DIRECTION RADIALS OF NETWORK ***

(DEGREES)	360.0,	22.5,	45.0,	67.5,	90.0,	112.5,	135.0,	157.5,	180.0,	202.5,
225.0,	247.5,	270.0,	292.5,	315.0,	337.5,					

*** DISCRETE CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD, ZELV, ZFLAG)		(METERS)					
(11858.3,	11508.3,	.0,	.0);	(11615.0,	11670.9,	.0,	.0);
(11328.0,	11728.0,	.0,	.0);	(11041.0,	11670.9,	.0,	.0);
(11328.0,	9978.0,	.0,	.0);	(11710.7,	10054.1,	.0,	.0);
(12035.1,	10270.9,	.0,	.0);	(12251.9,	10595.3,	.0,	.0);
(12328.0,	10978.0,	.0,	.0);	(12035.1,	11685.1,	.0,	.0);
(11710.7,	11901.9,	.0,	.0);	(11328.0,	11978.0,	.0,	.0);
(10945.3,	11901.9,	.0,	.0);	(10620.9,	11685.1,	.0,	.0);
(10404.1,	11360.7,	.0,	.0);	(10620.9,	10270.9,	.0,	.0);
(10945.3,	10054.1,	.0,	.0);	(11363.3,	10816.9,	.0,	.0);
(14662.7,	11118.8,	.0,	.0);	(10876.3,	17523.5,	.0,	.0);
(11444.7,	12436.3,	.0,	.0);	(13292.0,	12707.3,	.0,	.0);
(11423.8,	9111.7,	.0,	.0);	(8484.6,	9517.8,	.0,	.0);
(9118.7,	16434.2,	.0,	.0);				

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): S-34 ,S-35 ,S-36 ,S-37 ,S-64 ,S-65 ,S-66 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

*** CONC OF PM10 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	3.18581 (18032724)	2.57161 (18042624)	2.22316 (18052524)	2.01186 (18052524)	1.85383 (18052524)
22.5 |	4.36704 (18050324)	3.41509 (18050324)	2.79538 (18050324)	2.36255 (18050324)	2.06083 (18041424)
45.0 |	2.14691 (18042924)	1.78884 (18050924)	1.75636 (18050924)	1.73185 (18050924)	1.68857 (18050924)
67.5 |	3.41095 (18051724)	2.75097 (18050924)	2.53444 (18050924)	2.22193 (18050924)	1.91085 (18050924)
90.0 |	2.92985c(18051024)	2.05158c(18051024)	1.51839c(18030124)	1.28102c(18030124)	1.13773c(18030124)
112.5 |	3.20899 (18052724)	2.13846 (18052724)	1.84858c(18042324)	1.59455 (18040824)	1.47016 (18040824)
135.0 |	4.86046 (18040824)	3.61063 (18040824)	2.60591 (18040824)	1.94608 (18040824)	1.54683 (18040824)
157.5 |	4.62868 (18041524)	3.36788 (18041524)	2.54928 (18041524)	2.00401 (18041524)	1.61506 (18041524)
180.0 |	7.58249 (18052824)	4.99983 (18052824)	3.54198 (18052824)	2.68334 (18052824)	2.11818 (18052824)
202.5 |	2.18944 (18031324)	1.46357 (18031324)	1.05807 (18031324)	.84838 (18030224)	.80912 (18031824)
225.0 |	3.54135 (18052924)	2.87275 (18052924)	2.49842 (18052924)	2.18788 (18052924)	1.91966 (18052924)
247.5 |	6.02894 (18052124)	4.04600 (18052124)	2.78259 (18052124)	2.02340 (18052124)	1.53823 (18052124)
270.0 |	3.97985c(18051924)	2.76984c(18051924)	2.09515c(18051924)	1.65459c(18051924)	1.36125c(18051924)
292.5 |	4.70646 (18052024)	3.41279c(18051924)	2.96147c(18051924)	2.64883c(18051924)	2.40369c(18051924)
315.0 |	4.48048 (18053024)	3.71418 (18053024)	3.12892 (18053024)	2.64813 (18053024)	2.26254 (18053024)
337.5 |	3.60153 (18053024)	3.17686 (18053024)	2.89705 (18053024)	2.68463 (18053024)	2.51081 (18053024)

: A-131 :

ANNEXURE : XXIII CONTD.

ANNEXURE : XXIII CONTD.

DIRECTION | (DEGREES) |	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	1.72738 (18052524)	1.53401 (18052524)	1.32158 (18052124)	1.08721 (18052124)
22.5 |	1.87455 (18041424)	1.57714 (18041424)	1.18327 (18041424)	.85504 (18041424)
45.0 |	1.62293 (18050924)	1.46748 (18050924)	1.18268 (18050924)	.88479 (18050924)
67.5 |	1.81079 (18041624)	1.77865 (18041624)	1.61991 (18041624)	1.36182 (18041624)
90.0 |	1.03956c(18030124)	.89754c(18051024)	.77245c(18051024)	.63418 (18031624)
112.5 |	1.35519 (18040824)	1.13673 (18040824)	.78386 (18040824)	.48214 (18040824)
135.0 |	1.30411 (18040824)	1.03103 (18040824)	.77077 (18040824)	.56786 (18040824)
157.5 |	1.32681 (18041524)	.93999 (18041524)	.55465 (18041524)	.34101 (18041524)
180.0 |	1.71741 (18052824)	1.19459 (18052824)	.67805 (18052824)	.38598 (18052824)
202.5 |	.82951 (18031824)	.81783 (18031824)	.72627 (18031824)	.58988 (18031824)
225.0 |	1.69073 (18052924)	1.33955 (18052924)	.91292 (18052924)	.59920 (18052924)
247.5 |	1.20915 (18052124)	.80537 (18052124)	.52795 (18031624)	.37919 (18031624)
270.0 |	1.15483c(18051924)	.88324c(18051924)	.59418c(18051924)	.39209c(18051924)
292.5 |	2.19992c(18051924)	1.88308c(18051924)	1.50962c(18051924)	1.24102c(18051924)
315.0 |	1.95610 (18053024)	1.63060 (18052024)	1.50328 (18052024)	1.31622 (18052024)
337.5 |	2.35987 (18053024)	2.10472 (18053024)	1.72305 (18053024)	1.34358 (18053024)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	4.11955 (18042824)	11615.01	11670.91	7.01845 (18050324)
11328.00	11728.00	6.33947 (18052524)	11040.99	11670.91	7.66454 (18042624)
11328.00	9978.00	8.59672 (18052824)	11710.68	10054.12	5.40311 (18041524)
12035.11	10270.89	6.27552 (18040824)	12251.88	10595.32	6.56570 (18052724)
12328.00	10978.00	4.47784 (18041624)	12035.11	11685.11	3.36335 (18042824)
11710.68	11901.88	5.93421 (18050324)	11328.00	11978.00	4.53005 (18032724)
10945.32	11901.88	5.94447 (18042624)	10620.89	11685.11	6.38115 (18053024)
10404.12	11360.68	8.09682 (18052024)	10620.89	10270.89	5.95445 (18052924)
10945.32	10054.12	2.96334 (18031324)	11363.31	10816.90	.35121 (18051724)
14662.73	11118.76	1.27906c (18030124)	10876.32	17523.53	1.42391 (18052324)
11444.70	12436.35	3.75078 (18050324)	13292.04	12707.34	2.02533 (18051724)
11423.82	9111.71	5.67949 (18052824)	8484.59	9517.75	1.12380 (18031624)
9118.69	16434.20	1.81364 (18053024)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): S-34 , S-35 , S-36 , S-37 , S-64 , S-65 , S-66 ,

RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR
1.	8.59672 (18052824) AT (11328.00, 9978.00) DC	26.	5.51394 (18051424) AT (11040.99, 11670.91) DC		
2.	8.09682 (18052024) AT (10404.12, 11360.68) DC	27.	5.42632 (18032724) AT (11328.00, 11728.00) DC		
3.	7.66454 (18042624) AT (11040.99, 11670.91) DC	28.	5.40311 (18041524) AT (11710.68, 10054.12) DC		
4.	7.58249 (18052824) AT (11328.00, 9478.00) GP	29.	5.33611 (18040924) AT (12035.11, 10270.89) DC		
5.	7.01845 (18050324) AT (11615.01, 11670.91) DC	30.	5.28448 (18050724) AT (10945.32, 11901.88) DC		
6.	6.81326 (18052324) AT (11040.99, 11670.91) DC	31.	5.11923 (18033124) AT (11710.68, 10054.12) DC		
7.	6.56570 (18052724) AT (12251.88, 10595.32) DC	32.	5.05764 (18032224) AT (10945.32, 11901.88) DC		
8.	6.55754 (18032224) AT (11040.99, 11670.91) DC	33.	4.99983 (18052824) AT (11328.00, 8978.00) GP		
9.	6.45811 (18050724) AT (11040.99, 11670.91) DC	34.	4.96560 (18052324) AT (11328.00, 11728.00) DC		
10.	6.38115 (18053024) AT (10620.89, 11685.11) DC	35.	4.95776c(18042324) AT (12035.11, 10270.89) DC		
11.	6.33947 (18052524) AT (11328.00, 11728.00) DC	36.	4.93249c(18042024) AT (12035.11, 10270.89) DC		
12.	6.30636 (18052424) AT (11040.99, 11670.91) DC	37.	4.92568 (18041824) AT (11328.00, 9978.00) DC		
13.	6.27552 (18040824) AT (12035.11, 10270.89) DC	38.	4.91433 (18033124) AT (12035.11, 10270.89) DC		
14.	6.14446 (18052424) AT (10620.89, 11685.11) DC	39.	4.91205 (18052524) AT (11040.99, 11670.91) DC		
15.	6.02894 (18052124) AT (9942.18, 10403.97) GP	40.	4.87701 (18052324) AT (10945.32, 11901.88) DC		
16.	5.98391 (18042724) AT (11040.99, 11670.91) DC	41.	4.86046 (18040824) AT (12388.66, 9917.34) GP		
17.	5.95445 (18052924) AT (10620.89, 10270.89) DC	42.	4.84314 (18051124) AT (11040.99, 11670.91) DC		
18.	5.94447 (18042624) AT (10945.32, 11901.88) DC	43.	4.83275c(18031924) AT (12035.11, 10270.89) DC		
19.	5.93421 (18050324) AT (11710.68, 11901.88) DC	44.	4.80031 (18042224) AT (12251.88, 10595.32) DC		
20.	5.79219 (18051224) AT (11615.01, 11670.91) DC	45.	4.79097 (18052424) AT (10945.32, 11901.88) DC		
21.	5.73662 (18051224) AT (11328.00, 11728.00) DC	46.	4.77061c(18042524) AT (11710.68, 10054.12) DC		
22.	5.70848 (18053024) AT (11040.99, 11670.91) DC	47.	4.70646 (18052024) AT (9942.18, 11552.03) GP		
23.	5.67949 (18052824) AT (11423.82, 9111.71) DC	48.	4.64396 (18032724) AT (11615.01, 11670.91) DC		
24.	5.66077c(18051924) AT (10404.12, 11360.68) DC	49.	4.62916 (18051324) AT (11040.99, 11670.91) DC		
25.	5.59977 (18050324) AT (11328.00, 11728.00) DC	50.	4.62868 (18041524) AT (11902.03, 9592.18) GP		

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): S-34 , S-35 , S-36 , S-37 , S-64 , S-65 , S-66 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF PM2.5 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	1.83184 (18032724)	1.47868 (18042624)	1.27831 (18052524)	1.15682 (18052524)	1.06595 (18052524)
22.5 |	2.51105 (18050324)	1.96367 (18050324)	1.60734 (18050324)	1.35847 (18050324)	1.18498 (18041424)
45.0 |	1.23447 (18042924)	1.02858 (18050924)	1.00991 (18050924)	.99581 (18050924)	.97093 (18050924)
67.5 |	1.96130 (18051724)	1.58181 (18050924)	1.45730 (18050924)	1.27761 (18050924)	1.09874 (18050924)
90.0 |	1.68466c(18051024)	1.17966c(18051024)	.87308c(18030124)	.73659c(18030124)	.65419c(18030124)
112.5 |	1.84517 (18052724)	1.22962 (18052724)	1.06293c(18042324)	.91687 (18040824)	.84534 (18040824)
135.0 |	2.79477 (18040824)	2.07611 (18040824)	1.49840 (18040824)	1.11900 (18040824)	.88943 (18040824)
157.5 |	2.66149 (18041524)	1.93653 (18041524)	1.46584 (18041524)	1.15231 (18041524)	.92866 (18041524)
180.0 |	4.35993 (18052824)	2.87490 (18052824)	2.03664 (18052824)	1.54292 (18052824)	1.21795 (18052824)
202.5 |	1.25893 (18031324)	.84155 (18031324)	.60839 (18031324)	.48782 (18030224)	.46525 (18031824)
225.0 |	2.03627 (18052924)	1.65183 (18052924)	1.43659 (18052924)	1.25803 (18052924)	1.10380 (18052924)
247.5 |	3.46664 (18052124)	2.32645 (18052124)	1.59999 (18052124)	1.16345 (18052124)	.88448 (18052124)
270.0 |	2.28841c(18051924)	1.59266c(18051924)	.20471c(18051924)	.95139c(18051924)	.78272c(18051924)
292.5 |	2.70621 (18052024)	1.96235c(18051924)	1.70285c(18051924)	1.52307c(18051924)	.38212c(18051924)
315.0 |	2.57628 (18053024)	2.13565 (18053024)	1.79913 (18053024)	1.52268 (18053024)	1.30096 (18053024)
337.5 |	2.07088 (18053024)	1.82670 (18053024)	1.66580 (18053024)	1.54366 (18053024)	1.44372 (18053024)

DIRECTION | (DEGREES) |	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	.99325 (18052524)	.88206 (18052524)	.75991 (18052124)	.62515 (18052124)
22.5 |	1.07787 (18041424)	.90685 (18041424)	.68038 (18041424)	.49165 (18041424)
45.0 |	.93319 (18050924)	.84380 (18050924)	.68004 (18050924)	.50875 (18050924)
67.5 |	1.04121 (18041624)	1.02272 (18041624)	.93145 (18041624)	.78305 (18041624)
90.0 |	.59775c(18030124)	.51608c(18051024)	.44416c(18051024)	.36465 (18031624)
112.5 |	.77424 (18040824)	.65362 (18040824)	.45072 (18040824)	.27723 (18040824)
135.0 |	.74986 (18040824)	.59284 (18040824)	.44319 (18040824)	.32652 (18040824)
157.5 |	.76292 (18041524)	.54049 (18041524)	.31892 (18041524)	.19608 (18041524)
180.0 |	.98751 (18052824)	.68689 (18052824)	.38988 (18052824)	.22194 (18052824)
202.5 |	.47697 (18031824)	.47025 (18031824)	.41761 (18031824)	.33918 (18031824)
225.0 |	.97217 (18052924)	.77024 (18052924)	.52493 (18052924)	.34454 (18052924)
247.5 |	.69526 (18052124)	.46309 (18052124)	.30357 (18031624)	.21803 (18031624)
270.0 |	.66403c(18051924)	.50786c(18051924)	.34165c(18051924)	.22545c(18051924)
292.5 |	1.26496c(18051924)	1.08277c(18051924)	.86803c(18051924)	.71358c(18051924)
315.0 |	1.12476 (18053024)	.93760 (18052024)	.86439 (18052024)	.75683 (18052024)
337.5 |	1.35692 (18053024)	1.21021 (18053024)	.99075 (18053024)	.77256 (18053024)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	2.36874 (18042824)	11615.01	11670.91	4.03561 (18050324)
11328.00	11728.00	3.64519 (18052524)	11040.99	11670.91	4.40711 (18042624)
11328.00	9978.00	4.94311 (18052824)	11710.68	10054.12	3.10679 (18041524)
12035.11	10270.89	3.60842 (18040824)	12251.88	10595.32	3.77528 (18052724)
12328.00	10978.00	2.57476 (18041624)	12035.11	11685.11	1.93393 (18042824)
11710.68	11901.88	3.41217 (18050324)	11328.00	11978.00	2.60478 (18032724)
10945.32	11901.88	3.41807 (18042624)	10620.89	11685.11	3.66916 (18053024)
10404.12	11360.68	4.65567 (18052024)	10620.89	10270.89	3.42381 (18052924)
10945.32	10054.12	1.70392 (18031324)	11363.31	10816.90	.20195 (18051724)
14662.73	11118.76	.73546c(18030124)	10876.32	17523.53	.81875 (18052324)
11444.70	12436.35	2.15670 (18050324)	13292.04	12707.34	1.16456 (18051724)
11423.82	9111.71	3.26571 (18052824)	8484.59	9517.75	.64618 (18031624)
9118.69	16434.20	1.04284 (18053024)			

: A-132 :

ANNEXURE : XXIII CONTD.

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): S-34 ,S-35 ,S-36 ,S-37 ,S-64 ,S-65 ,S-66 ,

RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	4.94311 (18052824) AT (11328.00, 9978.00) DC	26.	3.17051 (18051424) AT (11040.99, 11670.91) DC		
2.	4.65567 (18052024) AT (10404.12, 11360.68) DC	27.	3.12013 (18032724) AT (11328.00, 11728.00) DC		
3.	4.40711 (18042624) AT (11040.99, 11670.91) DC	28.	3.10679 (18041524) AT (11710.68, 10054.12) DC		
4.	4.35993 (18052824) AT (11328.00, 9478.00) GP	29.	3.06827 (18040924) AT (12035.11, 10270.89) DC		
5.	4.03561 (18050324) AT (11615.01, 11670.91) DC	30.	3.03858 (18050724) AT (10945.32, 11901.88) DC		
6.	3.91762 (18052324) AT (11040.99, 11670.91) DC	31.	2.94356 (18033124) AT (11710.68, 10054.12) DC		
7.	3.77528 (18052724) AT (12251.88, 10595.32) DC	32.	2.90814 (18032224) AT (10945.32, 11901.88) DC		
8.	3.77058 (18032224) AT (11040.99, 11670.91) DC	33.	2.87490 (18052824) AT (11328.00, 8978.00) GP		
9.	3.71341 (18050724) AT (11040.99, 11670.91) DC	34.	2.85522 (18052324) AT (11328.00, 11728.00) DC		
10.	3.66916 (18053024) AT (10620.89, 11685.11) DC	35.	2.85071c(18042324) AT (12035.11, 10270.89) DC		
11.	3.64519 (18052524) AT (11328.00, 11728.00) DC	36.	2.83618c(18042024) AT (12035.11, 10270.89) DC		
12.	3.62616 (18052424) AT (11040.99, 11670.91) DC	37.	2.83227 (18041824) AT (11328.00, 9978.00) DC		
13.	3.60842 (18040824) AT (12035.11, 10270.89) DC	38.	2.82574 (18033124) AT (12035.11, 10270.89) DC		
14.	3.53306 (18052424) AT (10620.89, 11685.11) DC	39.	2.82443 (18052524) AT (11040.99, 11670.91) DC		
15.	3.46664 (18052124) AT (9942.18, 10403.97) GP	40.	2.80428 (18052324) AT (10945.32, 11901.88) DC		
16.	3.44075 (18042724) AT (11040.99, 11670.91) DC	41.	2.79477 (18040824) AT (12388.66, 9917.34) GP		
17.	3.42381 (18052924) AT (10620.89, 10270.89) DC	42.	2.78480 (18051124) AT (11040.99, 11670.91) DC		
18.	3.41807 (18042624) AT (10945.32, 11901.88) DC	43.	2.77883c(18031924) AT (12035.11, 10270.89) DC		
19.	3.41217 (18050324) AT (11710.68, 11901.88) DC	44.	2.76018 (18042224) AT (12251.88, 10595.32) DC		
20.	3.33051 (18051224) AT (11615.01, 11670.91) DC	45.	2.75480 (18052424) AT (10945.32, 11901.88) DC		
21.	3.29856 (18051224) AT (11328.00, 11728.00) DC	46.	2.74310c(18042524) AT (11710.68, 10054.12) DC		
22.	3.28237 (18053024) AT (11040.99, 11670.91) DC	47.	2.70621 (18052024) AT (9942.18, 11552.03) GP		
23.	3.26571 (18052824) AT (11423.82, 9111.71) DC	48.	2.67028 (18032724) AT (11710.68, 11670.91) DC		
24.	3.25494c(18051924) AT (10404.12, 11360.68) DC	49.	2.66177 (18051324) AT (11040.99, 11670.91) DC		
25.	3.21986 (18050324) AT (11328.00, 11728.00) DC	50.	2.66149 (18041524) AT (11902.03, 9592.18) GP		

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): S-34 ,S-35 ,S-64 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

**** CONC OF SO2 IN MICROGRAMS/M**3 ****

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	6.79421 (18052524)	5.77086 (18052524)	4.93170 (18052524)	4.28182 (18052524)	3.77420 (18052524)
22.5 |	4.40484 (18052524)	3.77306 (18051324)	3.30878 (18051324)	2.92458 (18051324)	2.60402 (18051324)
45.0 |	2.95300 (18051724)	2.62076 (18051724)	2.31422 (18051724)	2.05203 (18051724)	1.83471 (18051724)
67.5 |	3.96607 (18051724)	3.59260 (18051724)	3.17872 (18051724)	2.77525 (18051724)	2.40943 (18051724)
90.0 |	3.23221 (18040724)	2.59262 (18040724)	2.20875 (18052724)	2.06705 (18052724)	1.93545 (18052724)
112.5 |	5.83722 (18052724)	5.51225 (18052724)	4.53293 (18052724)	3.72716 (18052724)	3.29669 (18040824)
135.0 |	2.78548c(18030524)	3.20264 (18033124)	4.01517 (18033124)	4.10196 (18033124)	3.81853 (18033124)
157.5 |	3.41229 (18030824)	3.86188 (18030824)	3.81566 (18030824)	3.75322 (18041524)	3.54536 (18041524)
180.0 |	.98952 (18030824)	2.56973 (18052824)	3.76208 (18052824)	4.19524 (18052824)	4.11570 (18052824)
202.5 |	2.17731 (18040224)	1.99485 (18040224)	1.65519 (18040224)	1.62706 (18031524)	1.52775 (18031524)
225.0 |	1.77702 (18031524)	2.15851 (18031524)	2.13178 (18031524)	1.94338 (18031524)	1.71432 (18031524)
247.5 |	5.67991 (18052924)	5.06540 (18052924)	3.93397 (18052924)	3.05742 (18052924)	2.49385 (18052124)
270.0 |	4.44479 (18052924)	4.52218 (18052924)	4.10852 (18052924)	3.70978 (18052924)	3.35724 (18052924)
292.5 |	7.83252 (18052024)	7.06298 (18052024)	6.02161 (18052024)	5.06370 (18052024)	4.26992 (18052024)
315.0 |	7.21664 (18053024)	5.76734 (18053024)	4.70527 (18053024)	3.98265 (18053024)	3.45984 (18053024)
337.5 |	7.28816 (18052424)	6.69036 (18052424)	6.10104 (18052424)	5.55709 (18052424)	5.06259 (18052424)

ANNEXURE : XXIII CONTD.

DIRECTION | (DEGREES) | 4000.00 5000.00 7000.00 10000.00

360.0 |	3.37122 (18052524)	2.77924 (18052524)	2.07733 (18052524)	1.54954 (18052524)
22.5 |	2.39499 (18050324)	2.05160 (18050324)	1.56945 (18050324)	1.19548 (18050324)
45.0 |	1.65664 (18051724)	1.39357 (18051724)	1.10046 (18051724)	90499 (18051724)
67.5 |	2.09212 (18051724)	1.60148 (18051724)	1.04982 (18051724)	.77702 (18050524)
90.0 |	1.81510 (18052724)	1.60732 (18052724)	1.29827 (18052724)	1.00255 (18052724)
112.5 |	3.36188 (18040824)	3.05959 (18040824)	2.18828 (18040824)	1.38443 (18040824)
135.0 |	3.41773 (18033124)	2.65745 (18033124)	1.69004 (18033124)	1.07317 (18033124)
157.5 |	3.17837 (18041524)	2.54336 (18030824)	1.78492 (18030824)	1.23550 (18030824)
180.0 |	3.79590 (18052824)	3.01517 (18052824)	1.89867 (18052824)	1.18751 (18052824)
202.5 |	1.38209 (18031524)	1.16682 (18031324)	.85012 (18031324)	.57059 (18031324)
225.0 |	1.50086 (18031524)	1.16825 (18031524)	.78740 (18031524)	.53541 (18031524)
247.5 |	2.18732 (18052124)	1.60124 (18052124)	.95190 (18052224)	.70734 (18052224)
270.0 |	3.05350 (18052924)	2.57074 (18052924)	1.93960 (18052924)	1.41429 (18052924)
292.5 |	3.63459 (18052024)	2.72874 (18052024)	1.75349 (18052024)	1.17133c(18033024)
315.0 |	3.06205 (18053024)	2.55259c(18051824)	1.98790c(18051824)	1.54947c(18051824)
337.5 |	4.62234 (18052424)	3.89873 (18052424)	2.93260 (18052424)	2.15056 (18052424)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	2.34539 (18051724)	11615.01	11670.91	3.43546 (18051224)
11328.00	11728.00	4.80820 (18051524)	11040.99	11670.91	5.80255 (18051524)
11328.00	9978.00	.04300 (18030824)	11710.68	10054.12	.64418c (18032124)
12035.11	10270.89	1.42957 (18040724)	12251.88	10595.32	2.47765 (18052724)
12328.00	10978.00	2.85040c (18030124)	12035.11	11685.11	2.95974 (18051724)
11710.68	11901.88	4.19765 (18052524)	11328.00	11978.00	6.42553 (18052524)
10945.32	11901.88	6.79382 (18051524)	10620.89	11685.11	7.14154 (18052424)
10404.12	11360.68	6.56495 (18052024)	10620.89	10270.89	.21998 (18040924)
10945.32	10054.12	.03586 (18042224)	11363.31	10816.90	.00007 (18032724)
14662.73	11118.76	1.74605c (18031224)	10876.32	17523.53	2.44793 (18052224)
11444.70	12436.35	6.79698 (18052524)	13292.04	12707.34	2.62478 (18051724)
11423.82	9111.71	2.39954 (18052824)	8484.59	9517.75	1.84449 (18030924)
9118.69	16434.20	3.36882 (18052424)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): S-34 ,S-35 ,S-64 ,

**** CONC OF SO2 IN MICROGRAMS/M**3 ****

RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	7.83252 (18052024) AT (9942.18, 11552.03) GP	26.	5.79028 (18051524) AT (11328.00, 11978.00) DC		
2.	7.28816 (18052424) AT (10753.97, 12363.82) GP	27.	5.77719 (18052224) AT (10562.63, 12825.76) GP		
3.	7.21664 (18053024) AT (10267.34, 12038.66) GP	28.	5.77086 (18052524) AT (11328.00, 12978.00) GP		
4.	7.14154 (18052424) AT (10620.89, 11685.11) DC	29.	5.76734 (18053024) AT (9913.79, 12392.21) GP		
5.	7.06629 (18053024) AT (10753.97, 12363.82) GP	30.	5.76021 (18052224) AT (11328.00, 12478.00) GP		
6.	7.06298 (18052024) AT (9480.24, 11743.37) GP	31.	5.74854 (18052324) AT (10620.89, 11685.11) DC		
7.	6.90238 (18052424) AT (10267.34, 12038.66) GP	32.	5.73851 (18051624) AT (10753.97, 12363.82) GP		
8.	6.83748 (18052224) AT (10753.97, 12363.82) GP	33.	5.67991 (18052924) AT (9942.18, 10403.97) GP		
9.	6.79698 (18052524) AT (11444.70, 12436.35) DC	34.	5.61108 (18052224) AT (10945.32, 11901.88) DC		
10.	6.79421 (18052524) AT (11328.00, 12478.00) GP	35.	5.60356 (18052324) AT (10945.32, 11901.88) DC		
11.	6.79382 (18051524) AT (10945.32, 11901.88) DC	36.	5.56884c(18051924) AT (9942.18, 11552.03) GP		
12.	6.69036 (18052424) AT (10562.63, 12825.76) GP	37.	5.5709 (18052424) AT (10179.95, 13749.64) GP		
13.	6.56495 (18052024) AT (10404.12, 11360.68) DC	38.	5.51225 (18052724) AT (13175.76, 10212.63) GP		
14.	6.42553 (18052524) AT (11328.00, 11978.00) DC	39.	5.30431 (18051624) AT (10945.32, 11901.88) DC		
15.	6.35636 (18053024) AT (10620.89, 11685.11) DC	40.	5.12925 (18053024) AT (10371.29, 13287.70) GP		
16.	6.15892 (18053024) AT (10945.32, 11901.88) DC	41.	5.06540 (18052924) AT (9480.24, 10212.63) GP		
17.	6.14759 (18052424) AT (10945.32, 11901.88) DC	42.	5.06370 (18052024) AT (8556.36, 12126.05) GP		
18.	6.10104 (18052424) AT (10371.29, 13287.70) GP	43.	5.06259 (18052424) AT (9988.61, 14211.58) GP		
19.	6.02161 (18052024) AT (9018.30, 11934.71) GP	44.	5.05971 (18051524) AT (11328.00, 12478.00) GP		
20.	6.01826 (18053024) AT (10562.63, 12825.76) GP	45.	5.05221c(18051924) AT (9480.24, 11743.37) GP		
21.	5.97994 (18052324) AT (10267.34, 12038.66) GP	46.	5.03152 (18052424) AT (9913.79, 12392.21) GP		
22.	5.94912 (18051524) AT (10753.97, 12363.82) GP	47.	4.98815 (18052324) AT (10562.63, 12825.76) GP		
23.	5.90956 (18052324) AT (10753.97, 12363.82) GP	48.	4.95113 (18052224) AT (11444.70, 12436.35) DC		
24.	5.83722 (18052724) AT (12713.82, 10403.97) GP	49.	4.94380 (18051624) AT (10562.63, 12825.76) GP		
25.	5.80255 (18051524) AT (11040.99, 11670.91) DC	50.	4.94023 (18051324) AT (11444.70, 12436.35) DC		

ANNEXURE : XXIII CONTD.

ANNEXURE : XXIII CONTD.

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): S-34 ,S-35 ,S-64 ,
 *** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

**** CONC OF NO2 IN MICROGRAMS/M**3 ****

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	6.79421 (18052524)	5.77086 (18052524)	4.93170 (18052524)	4.28182 (18052524)	3.77420 (18052524)
22.5 |	4.40484 (18052524)	3.77306 (18051324)	3.30878 (18051324)	2.92458 (18051324)	2.60402 (18051324)
45.0 |	2.95300 (18051724)	2.62076 (18051724)	2.31422 (18051724)	2.05203 (18051724)	1.83471 (18051724)
67.5 |	3.96607 (18051724)	3.59260 (18051724)	3.17872 (18051724)	2.77525 (18051724)	2.40943 (18051724)
90.0 |	3.23221 (18040724)	2.59262 (18040724)	2.20875 (18052724)	2.06705 (18052724)	1.93545 (18052724)
112.5 |	5.83722 (18052724)	5.51225 (18052724)	4.53293 (18052724)	3.72716 (18052724)	3.29669 (18040824)
135.0 |	2.78548c(18030524)	3.20264 (18033124)	4.01517 (18033124)	4.10196 (18033124)	3.81853 (18033124)
157.5 |	3.41229 (18030824)	3.86188 (18030824)	3.81566 (18030824)	3.75322 (18041524)	3.54536 (18041524)
180.0 |	.98952 (18030824)	2.56973 (18052824)	3.76208 (18052824)	4.19524 (18052824)	4.11570 (18052824)
202.5 |	2.17731 (18040224)	1.99485 (18040224)	1.65519 (18040224)	1.62706 (18031524)	1.52775 (18031524)
225.0 |	1.77702 (18031524)	2.15851 (18031524)	2.13178 (18031524)	1.94338 (18031524)	1.71432 (18031524)
247.5 |	5.67991 (18052924)	5.06540 (18052924)	3.93397 (18052924)	3.05742 (18052924)	2.49385 (18052124)
270.0 |	4.44479 (18052924)	4.52218 (18052924)	4.10852 (18052924)	3.70978 (18052924)	3.35724 (18052924)
292.5 |	7.83252 (18052024)	7.06298 (18052024)	6.02161 (18052024)	5.06370 (18052024)	4.26992 (18052024)
315.0 |	7.21664 (18053024)	5.76734 (18053024)	4.70527 (18053024)	3.98265 (18053024)	3.45984 (18053024)
337.5 |	7.28816 (18052424)	6.69036 (18052424)	6.10104 (18052424)	5.55709 (18052424)	5.06259 (18052424)

DIRECTION | (DEGREES) |	DISTANCE (METERS)		
	4000.00	5000.00	10000.00

360.0 |	3.37122 (18052524)	2.77924 (18052524)	2.07733 (18052524)	1.54954 (18052524)
22.5 |	2.39499 (18050324)	2.05160 (18050324)	1.56945 (18050324)	1.19548 (18050324)
45.0 |	1.65664 (18051724)	1.39357 (18051724)	1.10046 (18051724)	.90499 (18051724)
67.5 |	2.09212 (18051724)	1.60148 (18051724)	1.04982 (18051724)	.77702 (18050524)
90.0 |	1.81510 (18052724)	1.60732 (18052724)	1.29827 (18052724)	1.00255 (18052724)
112.5 |	3.36188 (18040824)	3.05959 (18040824)	2.18828 (18040824)	1.38443 (18040824)
135.0 |	3.41773 (18033124)	2.65745 (18033124)	1.69004 (18033124)	1.07317 (18033124)
157.5 |	3.17837 (18041524)	2.54336 (18030824)	1.78492 (18030824)	1.23550 (18030824)
180.0 |	3.79590 (18052824)	3.01517 (18052824)	1.89867 (18052824)	1.18751 (18052824)
202.5 |	1.38209 (18031524)	1.16682 (18031324)	.85012 (18031324)	.57059 (18031324)
225.0 |	1.50086 (18031524)	1.16825 (18031524)	.78740 (18031524)	.53541 (18031524)
247.5 |	2.18732 (18052124)	1.60124 (18052124)	.95190 (18052224)	.70734 (18052224)
270.0 |	3.05350 (18052924)	2.57074 (18052924)	1.93960 (18052924)	1.41429 (18052924)
292.5 |	3.63459 (18052024)	2.72874 (18052024)	1.75349 (18052024)	1.17133c(18033024)
315.0 |	3.06205 (18053024)	2.55259c(18051824)	1.98790c(18051824)	1.54947c(18051824)
337.5 |	4.62234 (18052424)	3.89873 (18052424)	2.93260 (18052424)	2.15056 (18052424)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	2.34539 (18051724)	11615.01	11670.91	3.43546 (18051224)
11328.00	11728.00	4.80820 (18051524)	11040.99	11670.91	5.80255 (18051524)
11328.00	9978.00	.04300 (18030824)	11710.68	10054.12	.64418c (18032124)
12035.11	10270.89	1.42957 (18040724)	12251.88	10595.32	2.47765 (18052724)
12328.00	10978.00	2.85040c (18030124)	12035.11	11685.11	2.95974 (18051724)
11710.68	11901.88	4.19765 (18052524)	11328.00	11978.00	6.42553 (18052524)
10945.32	11901.88	6.79382 (18051524)	10620.89	11685.11	7.14154 (18052424)
10404.12	11360.68	6.56495 (18052024)	10620.89	10270.89	.21998 (18040924)
10945.32	10054.12	.03586 (18042224)	11363.31	10816.90	.00007 (18032724)
14662.73	11118.76	1.74605c (18031224)	10876.32	17523.53	2.44793 (18052224)
11444.70	12436.35	6.79698 (18052524)	13292.04	12707.34	2.62478 (18051724)
11423.82	9111.71	2.39954 (18052824)	8484.59	9517.75	1.84449 (18030924)
9118.69	16434.20	3.36882 (18052424)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): S-34 ,S-35 ,S-64 ,

RANK	CONC (YYMMDDHH)	AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH)	AT	RECEPTOR
1.	7.83252 (18052024)	AT (9942.18, 11552.03)	GP 26.	5.79028 (18051524)	AT (11328.00, 11978.00)	DC	
2.	7.28816 (18052424)	AT (10753.97, 12363.82)	GP 27.	5.77719 (18052224)	AT (10562.63, 12825.76)	GP	
3.	7.21664 (18053024)	AT (10267.34, 12038.66)	GP 28.	5.77086 (18052524)	AT (11328.00, 12978.00)	GP	
4.	7.14154 (18052424)	AT (10620.89, 11685.11)	DC 29.	5.76734 (18053024)	AT (9913.79, 12392.21)	GP	
5.	7.06629 (18053024)	AT (10753.97, 12363.82)	GP 30.	5.76021 (18052224)	AT (11328.00, 12478.00)	GP	
6.	7.06298 (18052024)	AT (9480.24, 11743.37)	GP 31.	5.74854 (18052324)	AT (10620.89, 11685.11)	DC	
7.	6.90238 (18052424)	AT (10267.34, 12038.66)	GP 32.	5.73851 (18051624)	AT (10753.97, 12363.82)	GP	
8.	6.83748 (18052224)	AT (10753.97, 12363.82)	GP 33.	5.67991 (18052924)	AT (9942.18, 10403.97)	GP	
9.	6.79698 (18052524)	AT (11444.70, 12436.35)	DC 34.	5.61108 (18052224)	AT (10945.32, 11901.88)	DC	
10.	6.79421 (18052524)	AT (11328.00, 12478.00)	GP 35.	5.60356 (18052324)	AT (10945.32, 11901.88)	DC	
11.	6.79382 (18051524)	AT (10945.32, 11901.88)	DC 36.	5.56884c(18051924)	AT (9942.18, 11552.03)	GP	
12.	6.69036 (18052424)	AT (10562.63, 12825.76)	GP 37.	5.55709 (18052424)	AT (10179.95, 13749.64)	GP	
13.	6.56495 (18052024)	AT (10404.12, 11360.68)	DC 38.	5.51225 (18052724)	AT (13175.76, 10212.63)	GP	
14.	6.42553 (18052524)	AT (11328.00, 11978.00)	DC 39.	5.30431 (18051624)	AT (10945.32, 11901.88)	DC	
15.	6.35636 (18053024)	AT (10620.89, 11685.11)	DC 40.	5.12925 (18053024)	AT (10371.29, 13287.70)	GP	
16.	6.15892 (18053024)	AT (10945.32, 11901.88)	DC 41.	5.06540 (18052924)	AT (9480.24, 10212.63)	GP	
17.	6.14759 (18052424)	AT (10945.32, 11901.88)	DC 42.	5.06370 (18052024)	AT (8556.36, 12126.05)	GP	
18.	6.10104 (18052424)	AT (10371.29, 13287.70)	GP 43.	5.06259 (18052424)	AT (9988.61, 14211.58)	GP	
19.	6.02161 (18052024)	AT (9018.30, 11934.71)	GP 44.	5.05971 (18051524)	AT (11328.00, 12478.00)	GP	
20.	6.01826 (18053024)	AT (10562.63, 12825.76)	GP 45.	5.05221c(18051924)	AT (9480.24, 11743.37)	GP	
21.	5.97994 (18052324)	AT (10267.34, 12038.66)	GP 46.	5.03152 (18052424)	AT (9913.79, 12392.21)	GP	
22.	5.94912 (18051524)	AT (10753.97, 12363.82)	GP 47.	4.98815 (18052324)	AT (10562.63, 12825.76)	GP	
23.	5.90956 (18052324)	AT (10753.97, 12363.82)	GP 48.	4.95113 (18052224)	AT (11444.70, 12436.35)	DC	
24.	5.83722 (18052724)	AT (12713.82, 10403.97)	GP 49.	4.94380 (18051624)	AT (10562.63, 12825.76)	GP	
25.	5.80255 (18051524)	AT (11040.99, 11670.91)	DC 50.	4.94023 (18051324)	AT (11444.70, 12436.35)	DC	

: A-134 :

ANNEXURE : XXIII CONTD.

ANNEXURE : XXIII CONTD.

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,
 DG-08 ,DG-09 ,DG-10 ,DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,
 *** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF PM10 IN MICROGRAMS/M**3 **					
DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	.60053 (18041424)	.47427 (18032724)	.37146 (18032724)	.35886 (18052124)	.36257 (18052124)
22.5 |	.64099 (18041424)	.51280 (18041424)	.39866 (18041424)	.36297c(18030524)	.31430c(18030524)
45.0 |	.57237 (18041824)	.49946 (18041824)	.40748 (18030924)	.38619 (18030924)	.35757 (18030924)
67.5 |	.82518 (18041624)	.79213 (18041624)	.70128 (18041624)	.63801 (18041624)	.59106 (18041624)
90.0 |	.42443c(18051024)	.33077c(18051024)	.33533c(18041324)	.28363c(18030124)	.26649c(18030124)
112.5 |	.38969 (18041124)	.37257 (18043024)	.28895 (18043024)	.23572 (18040824)	.23700 (18040824)
135.0 |	.35144 (18040824)	.25199 (18040824)	.19563 (18040824)	.16171 (18040824)	.15361 (18040924)
157.5 |	.24631 (18040924)	.19546 (18040924)	.16975 (18052724)	.15489 (18052724)	.13811 (18052724)
180.0 |	.28869 (18052824)	.20384 (18052824)	.15445 (18031324)	.13464 (18031324)	.11775 (18031324)
202.5 |	.52419 (18052824)	.35526 (18052824)	.23870 (18052824)	.21631 (18030224)	.19307 (18030224)
225.0 |	.24820 (18052924)	.18696 (18052924)	.15528 (18052924)	.13432 (18052924)	.11891 (18052924)
247.5 |	.77865 (18052924)	.55060 (18052924)	.42799 (18052924)	.34241 (18052924)	.27592 (18052924)
270.0 |	.67606 (18050224)	.54444 (18050224)	.40093 (18050224)	.31222 (18052824)	.24598 (18052824)
292.5 |	.81306 (18052424)	.55247(18052424)	.51368c(18051924)	.47631c(18051924)	.43754c(18051924)
315.0 |	.99089 (18053024)	.66206 (18053024)	.52002 (18053024)	.47662 (18052024)	.47381 (18052024)
337.5 |	.63942 (18042624)	.45171 (18052124)	.32754 (18052024)	.29256 (18052024)	.26980 (18052024)

** CONC OF PM2.5 IN MICROGRAMS/M**3 **					
DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	4000.00	5000.00	7000.00	10000.00	
360.0 |	.36798 (18052524)	.37797 (18052524)	.38276 (18052524)	.33257 (18052524)	
22.5 |	.26323 (18041424)	.24298 (18032724)	.24962 (18032724)	.24445 (18032724)	
45.0 |	.33136 (18030924)	.29171 (18030924)	.23055 (18030924)	.18255 (18030424)	
67.5 |	.55322 (18041624)	.49572 (18041624)	.41360 (18041624)	.31904 (18041624)	
90.0 |	.25826 (18051224)	.23232 (18051224)	.20099 (18040824)	.18750 (18040824)	
112.5 |	.22536 (18040824)	.18535 (18040824)	.13478 (18051324)	.11055 (18051324)	
135.0 |	.15157 (18040924)	.14938 (18040924)	.14284 (18040924)	.12861 (18040924)	
157.5 |	.12744 (18052724)	.09375 (18052724)	.05401 (18052724)	.02895 (18052724)	
180.0 |	.10372 (18031324)	.08248 (18031324)	.07947 (18050324)	.05880 (18050324)	
202.5 |	.18981 (18030224)	.18002 (18030224)	.13929 (18050524)	.09474 (18050524)	
225.0 |	.10689 (18052924)	.08901 (18052924)	.06804 (18031724)	.04799 (18052924)	
247.5 |	.22408 (18052924)	.15463 (18052924)	.10278 (18052124)	.07428 (18052124)	
270.0 |	.19737 (18050224)	.14680 (18050224)	.09741 (18050224)	.06512 (18050224)	
292.5 |	.40239c(18051924)	.34965c(18051924)	.28285c(18051924)	.22011c(18051924)	
315.0 |	.46955 (18052024)	.44190 (18052024)	.35860 (18052024)	.26366 (18052024)	
337.5 |	.25051 (18052024)	.20954 (18052024)	.16779 (18052224)	.13605 (18040624)	

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	.93781 (18042924)	11615.01	11670.91	.83571 (18050924)
11328.00	11728.00	1.02159 (18041424)	11040.99	11670.91	1.24101 (18041424)
11328.00	9978.00	.43538 (18052824)	11710.68	10054.12	.40590 (18040824)
12035.11	10270.89	.54179 (18040824)	12251.88	10595.32	.50075 (18040824)
12328.00	10978.00	.59709c (18051024)	12035.11	11685.11	.73042 (18042924)
11710.68	11901.88	.71752 (18041424)	11328.00	11978.00	.83708 (18041424)
10945.32	11901.88	1.00374 (18042624)	10620.89	11685.11	1.66965 (18053024)
10404.12	11360.68	1.67366 (18052024)	10620.89	10270.89	.87651 (18052824)
10945.32	10054.12	.88762 (18052824)	11363.31	10816.90	1.32165c (18030124)
14662.73	11118.76	.31184c (18041324)	10876.32	17523.53	.31806 (18052524)
11444.70	12436.35	.70406 (18041424)	13292.04	12707.34	.50688 (18041824)
11423.82	9111.71	.19100 (18052824)	8484.59	9517.75	.45596 (18052924)
9118.69	16434.20	.19425 (18052224)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,
 DG-08 ,DG-09 ,DG-10 ,DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,

RANK	CONC (YYMMDDHH) AT (XR,YR) OF TYPE	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT (XR,YR) OF TYPE	RECEPTOR (XR,YR) OF TYPE
1.	1.67366 (18052024) AT (10404.12, 11360.68) DC	26.	.95986 (18030824) AT (11363.31, 10816.90) DC		
2.	1.66965 (18053024) AT (10620.89, 11685.11) DC	27.	.95236 (18040624) AT (10620.89, 11685.11) DC		
3.	1.61440c(18051924) AT (10404.12, 11360.68) DC	28.	.94818 (18050824) AT (11040.99, 11670.91) DC		
4.	1.40015 (18052324) AT (10620.89, 11685.11) DC	29.	.94610 (18052124) AT (10620.89, 11685.11) DC		
5.	1.32455 (18052424) AT (10404.12, 11360.68) DC	30.	.94410 (18032224) AT (11040.99, 11670.91) DC		
6.	1.32165c(18030124) AT (11363.31, 10816.90) DC	31.	.93781 (18042924) AT (11858.33, 11508.33) DC		
7.	1.32058 (18052424) AT (10620.89, 11685.11) DC	32.	.93641 (18052724) AT (11363.31, 10816.90) DC		
8.	1.24101 (18041424) AT (11040.99, 11670.91) DC	33.	.93368 (18042824) AT (11040.99, 11670.91) DC		
9.	1.23762 (18042624) AT (11040.99, 11670.91) DC	34.	.93247 (18042624) AT (10620.89, 11685.11) DC		
10.	1.22487c(18030224) AT (10404.12, 11360.68) DC	35.	.93124 (18052024) AT (10620.89, 11685.11) DC		
11.	1.15093 (18032924) AT (10404.12, 11360.68) DC	36.	.93040 (18052224) AT (10620.89, 11685.11) DC		
12.	1.13055 (18052524) AT (11040.99, 11670.91) DC	37.	.92842 (18041724) AT (11363.31, 10816.90) DC		
13.	1.09044 (18041624) AT (11363.31, 10816.90) DC	38.	.92835 (18050424) AT (11040.99, 11670.91) DC		
14.	1.08908 (18053024) AT (10404.12, 11360.68) DC	39.	.91869 (18052524) AT (10945.32, 11901.88) DC		
15.	1.06568 (18032724) AT (11040.99, 11670.91) DC	40.	.91627 (18051124) AT (11040.99, 11670.91) DC		
16.	1.05405 (18033124) AT (11363.31, 10816.90) DC	41.	.91161 (18051524) AT (11040.99, 11670.91) DC		
17.	1.02159 (18041424) AT (11328.00, 11728.00) DC	42.	.90523 (18050724) AT (11040.99, 11670.91) DC		
18.	1.01188 (18052324) AT (11040.99, 11670.91) DC	43.	.90002 (18032724) AT (10945.32, 11901.88) DC		
19.	1.00374 (18042624) AT (10945.32, 11901.88) DC	44.	.89600 (18051724) AT (11363.31, 10816.90) DC		
20.	.99728 (18040324) AT (11363.31, 10816.90) DC	45.	.89085 (18050624) AT (11040.99, 11670.91) DC		
21.	.99089 (18053024) AT (10267.34, 12038.66) GP	46.	.88762 (18052824) AT (10945.32, 10054.12) DC		
22.	.98070 (18040824) AT (11363.31, 10816.90) DC	47.	.88437c(18051824) AT (10404.12, 11360.68) DC		
23.	.97486 (18050324) AT (11040.99, 11670.91) DC	48.	.87651 (18052824) AT (10620.89, 10270.89) DC		
24.	.96890 (18052524) AT (10620.89, 11685.11) DC	49.	.87371c(18042024) AT (11363.31, 10816.90) DC		
25.	.96880 (18051324) AT (11040.99, 11670.91) DC	50.	.85829 (18032424) AT (10620.89, 11685.11) DC		

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,
 DG-08 ,DG-09 ,DG-10 ,DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,

** CONC OF PM2.5 IN MICROGRAMS/M**3 **					
DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	.34531 (18041424)	.27270 (18032724)	.21359 (18032724)	.20635 (18052124)	.20848 (18052124)
22.5 |	.36857 (18041424)	.29486 (18041424)	.22923 (18041424)	.20871c(18030524)	.18072c(18030524)
45.0 |	.32911 (18041824)	.28719 (18041824)	.23430 (18030924)	.22206 (18030924)	.20561 (18030924)
67.5 |	.47448 (18041624)	.45547 (18041624)	.40323 (18041624)	.36685 (18041624)	.33986 (18041624)
90.0 |	.24405c(18051024)	.19019c(18051024)	.19282c(18041324)	.16309c(18030124)	.15323c(18030124)
112.5 |	.22407 (18041124)	.21423 (18043024)	.16615 (18043024)	.13554 (18040824)	.13627 (18040824)
135.0 |	.20208 (18040824)	.14490 (18040824)	.11249 (18040824)	.09298 (18040824)	.08833 (18040924)
157.5 |	.14163 (18040924)	.11239 (18040924)	.09760 (18052724)	.08906 (18052724)	.07941 (18052724)
180.0 |	.16599 (18052824)	.11721 (18052824)	.08881 (18031324)	.07742 (18031324)	.06771 (18031324)
202.5 |	.30141 (18052824)	.20427 (18052824)	.13725 (18052824)	.12438 (18030224)	.11102 (18030224)
225.0 |	.14271 (18052924)	.10750 (18052924)	.08929 (18052924)	.07724 (18052924)	.06837 (18052924)
247.5 |	.44772 (18052924)	.31659 (18052924)	.24610 (18052924)	.19689 (18052924)	.15865 (18052924)
270.0 |	.38873 (18050224)	.31305 (18050224)	.23054 (18050224)	.17952 (18052824)	.14144 (18052824)
292.5 |	.46751 (18052424)	.31767 (18052424)	.29537c(18051924)	.27388c(18051924)	.25159c(18051924)
315.0 |	.56976 (18053024)	.38069 (18053024)	.29901 (18053024)	.27406 (18052024)	.27244 (18052024)
337.5 |	.36767 (18042624)	.25973 (18052124)	.18833 (18052024)	.16822 (18052024)	.15513 (18052024)

ANNEXURE : XXIII CONTD.

ANNEXURE : XXIII CONTD.

DIRECTION | (DEGREES)	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	.21159 (18052524)	.21733 (18052524)	.22009 (18052524)	.19123 (18052524)
22.5 |	.15136 (18041424)	.13972 (18032724)	.14353 (18032724)	.14056 (18032724)
45.0 |	.19053 (18030924)	.16773 (18030924)	.13257 (18030924)	.10497 (18030424)
67.5 |	.31810 (18041624)	.28504 (18041624)	.23782 (18041624)	.18345 (18041624)
90.0 |	.14850 (18051224)	.13359 (18051224)	.11557 (18040824)	.10781 (18040824)
112.5 |	.12958 (18040824)	.10658 (18040824)	.07750 (18051324)	.06357 (18051324)
135.0 |	.08715 (18040924)	.08589 (18040924)	.08214 (18040924)	.07395 (18040924)
157.5 |	.07328 (18052724)	.05390 (18052724)	.03106 (18052724)	.01665 (18052724)
180.0 |	.05964 (18031324)	.04743 (18031324)	.04570 (18050324)	.03381 (18050324)
202.5 |	.10914 (18030224)	.10351 (18030224)	.08009 (18050524)	.05448 (18050524)
225.0 |	.06146 (18052924)	.05118 (18052924)	.03913 (18031724)	.02759 (18052924)
247.5 |	.12885 (18052924)	.08891 (18052924)	.05910 (18052124)	.04271 (18052124)
270.0 |	.11349 (18050224)	.08441 (18050224)	.05601 (18050224)	.03744 (18050224)
292.5 |	.23138c(18051924)	.20105c(18051924)	.16264c(18051924)	.12656c(18051924)
315.0 |	.26999 (18052024)	.25409 (18052024)	.20619 (18052024)	.15160 (18052024)
337.5 |	.14404 (18052024)	.12049 (18052024)	.09648 (18052224)	.07823 (18040624)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	53924 (18042924)	11615.01	11670.91	48053 (18050924)
11328.00	11728.00	58741 (18041424)	11040.99	11670.91	71358 (18041424)
11328.00	9978.00	25034 (18052824)	11710.68	10054.12	23339 (18040824)
12035.11	10270.89	31153 (18040824)	12251.88	10595.32	28793 (18040824)
12328.00	10978.00	34333c (18051024)	12035.11	11685.11	41999 (18042924)
11710.68	11901.88	41258 (18041424)	11328.00	11978.00	48132 (18041424)
10945.32	11901.88	57715 (18042624)	10620.89	11685.11	96005 (18053024)
10404.12	11360.68	96236 (18052024)	10620.89	10270.89	50399 (18052824)
10945.32	10054.12	51038 (18052824)	11363.31	10816.90	75995c (18030124)
14662.73	11118.76	17931c (18041324)	10876.32	17523.53	18288 (18052524)
11444.70	12436.35	40484 (18041424)	13292.04	12707.34	29146 (18041824)
11423.82	9111.71	10982 (18052824)	8484.59	9517.75	26218 (18052924)
9118.69	16434.20	11170 (18052224)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DG-01 , DG-02 , DG-03 , DG-04 , DG-05 , DG-06 , DG-07 ,
 DG-08 , DG-09 , DG-10 , DG-11 , DG-12 , DG-13 , DG-14 , DG-15 , DG-16 , DG-17 ,

RANK	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR
1.	.96236 (18052024) AT (10404.12, 11360.68) DC	26.	.55192 (18030824) AT (11363.31, 10816.90) DC		
2.	.96005 (18053024) AT (10620.89, 11685.11) DC	27.	.54761 (18040624) AT (10620.89, 11685.11) DC		
3.	.92828c(18051924) AT (10404.12, 11360.68) DC	28.	.54521 (18050824) AT (11040.99, 11670.91) DC		
4.	.80509 (18052324) AT (10620.89, 11685.11) DC	29.	.54401 (18052124) AT (10620.89, 11685.11) DC		
5.	.76162 (18052424) AT (10404.12, 11360.68) DC	30.	.54286 (18032224) AT (11040.99, 11670.91) DC		
6.	.75995c(18030124) AT (11363.31, 10816.90) DC	31.	.53924 (18042924) AT (11858.33, 11508.33) DC		
7.	.75933 (18052424) AT (10620.89, 11685.11) DC	32.	.53843 (18052724) AT (11363.31, 10816.90) DC		
8.	.71358 (18041424) AT (11040.99, 11670.91) DC	33.	.53687 (18042824) AT (11040.99, 11670.91) DC		
9.	.71163 (18042624) AT (11040.99, 11670.91) DC	34.	.53617 (18042624) AT (10620.89, 11685.11) DC		
10.	.70430c(18033024) AT (10404.12, 11360.68) DC	35.	.53546 (18052024) AT (10620.89, 11685.11) DC		
11.	.66178 (18032924) AT (10404.12, 11360.68) DC	36.	.53498 (18052224) AT (10620.89, 11685.11) DC		
12.	.65006 (18052524) AT (11040.99, 11670.91) DC	37.	.53384 (18041724) AT (11363.31, 10816.90) DC		
13.	.62700 (18041624) AT (11363.31, 10816.90) DC	38.	.53380 (18050424) AT (11040.99, 11670.91) DC		
14.	.62622 (18053024) AT (10404.12, 11360.68) DC	39.	.52824 (18052524) AT (10945.32, 11901.88) DC		
15.	.61277 (18032724) AT (11040.99, 11670.91) DC	40.	.52686 (18051124) AT (11040.99, 11670.91) DC		
16.	.60608 (18033124) AT (11363.31, 10816.90) DC	41.	.52417 (18051524) AT (11040.99, 11670.91) DC		
17.	.58741 (18041424) AT (11328.00, 11728.00) DC	42.	.52051 (18050724) AT (11040.99, 11670.91) DC		
18.	.58183 (18052324) AT (11040.99, 11670.91) DC	43.	.51751 (18032724) AT (10945.32, 11901.88) DC		
19.	.57715 (18042624) AT (10945.32, 11901.88) DC	44.	.51520 (18051724) AT (11363.31, 10816.90) DC		
20.	.57343 (18040324) AT (11363.31, 10816.90) DC	45.	.51224 (18050624) AT (11040.99, 11670.91) DC		
21.	.56976 (18053024) AT (10267.34, 12038.66) GP	46.	.51038 (18052824) AT (10945.32, 10054.12) DC		
22.	.56390 (18040824) AT (11363.31, 10816.90) DC	47.	.50851c(18051824) AT (10404.12, 11360.68) DC		
23.	.56055 (18050324) AT (11040.99, 11670.91) DC	48.	.50399 (18052824) AT (10620.89, 10270.89) DC		
24.	.55712 (18052524) AT (10620.89, 11685.11) DC	49.	.50238c(18042024) AT (11363.31, 10816.90) DC		
25.	.55706 (18051324) AT (11040.99, 11670.91) DC	50.	.49352 (18032424) AT (10620.89, 11685.11) DC		

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DG-01 , DG-02 , DG-03 , DG-04 , DG-05 , DG-06 , DG-07 ,
 DG-08 , DG-09 , DG-10 , DG-11 , DG-12 , DG-13 , DG-14 , DG-15 , DG-16 , DG-17 ,

DIRECTION | (DEGREES)	DISTANCE (METERS)				
	1500.00	2000.00	2500.00	3000.00	3500.00
360.0 |	4.97431 (18041424)	4.15114 (18032724)	3.24545 (18032724)	3.08632 (18052124)	3.15213 (18052524)
22.5 |	5.39507 (18041424)	4.34826 (18041424)	3.39456 (18041424)	3.06164c(18030524)	2.66748c(18030524)
45.0 |	4.82874 (18041824)	4.22224 (18041824)	3.57776 (18030924)	3.38583 (18030924)	3.14371 (18030924)
67.5 |	7.12494 (18041624)	6.90921 (18041624)	6.09844 (18041624)	5.53376 (18041624)	5.10924 (18041624)
90.0 |	3.69902 (18040324)	3.01535c(18041324)	3.05551c(18041324)	2.55216c(18041324)	2.36640 (18051224)
112.5 |	3.44629 (18043024)	3.34168 (18043024)	2.54713 (18043024)	2.08374 (18040824)	2.10694 (18040824)
135.0 |	3.01479 (18040824)	2.16711 (18040824)	1.68055 (18040824)	1.38524 (18040824)	1.31618 (18040924)
157.5 |	2.12917 (18040924)	1.72404 (18040924)	1.53024 (18052724)	1.38987 (18052724)	1.22163 (18052724)
180.0 |	2.48704 (18052824)	1.76712 (18052824)	1.41752 (18031324)	1.23362 (18031324)	1.07783 (18031324)
202.5 |	4.40069 (18052824)	2.96125 (18052824)	1.99505 (18052824)	1.93856 (18052824)	1.70458 (18030224)
225.0 |	2.32018 (18052924)	1.71900 (18052924)	1.40491 (18052924)	1.20164 (18052924)	1.05547 (18052924)
247.5 |	6.39683 (18052924)	4.58562 (18052924)	3.59665 (18052924)	2.89035 (18052924)	2.33988 (18052924)
270.0 |	5.62435 (18050224)	4.59406 (18050224)	3.40612 (18050224)	2.72370 (18052824)	2.11693 (18052824)
292.5 |	7.10248 (18052424)	4.83993c(18051924)	4.54382c(18051924)	4.20685c(18051924)	3.85430c(18051924)
315.0 |	8.68023 (18053024)	5.74362 (18053024)	4.46635 (18053024)	4.11796 (18052024)	4.11421 (18052024)
337.5 |	5.34188 (18042624)	3.93287 (18052124)	2.86735 (18052024)	2.53251 (18052024)	2.33640 (18052024)

DIRECTION | (DEGREES)	DISTANCE (METERS)			
	4000.00	5000.00	7000.00	10000.00
360.0 |	3.22298 (18052524)	3.30256 (18052524)	3.31056 (18052524)	2.86838 (18052524)
22.5 |	2.22396 (18041424)	2.13141 (18032724)	2.17297 (18032724)	2.11187 (18032724)
45.0 |	2.91884 (18030924)	2.56684 (18030924)	2.03357 (18030924)	1.53887 (18030424)
67.5 |	4.76520 (18041624)	4.25045 (18041624)	3.53922 (18041624)	2.73216 (18041624)
90.0 |	2.30147 (18051224)	2.06541 (18051224)	1.76678 (18040824)	1.63803 (18040824)
112.5 |	2.00097 (18040824)	1.62492 (18040824)	1.17927 (18051324)	.96443 (18051324)
135.0 |	1.30440 (18040924)	1.29488 (18040924)	1.24391 (18040924)	1.11884 (18040924)
157.5 |	1.11061 (18052724)	.81886 (18052724)	.47403 (18052724)	.25141 (18052724)
180.0 |	.94877 (18031324)	.75414 (18031324)	.67902 (18050324)	.50380 (18050324)
202.5 |	1.61958 (18030224)	1.51790 (18030224)	1.21260 (18050524)	.84607 (18050524)
225.0 |	.94335 (18052924)	.77921 (18052924)	.57731 (18052924)	.41355 (18052924)
247.5 |	1.90625 (18052924)	1.31738 (18052924)	.90639 (18052124)	.65544 (18052124)
270.0 |	1.67163 (18050224)	1.24307 (18050224)	.82528 (18050224)	.55219 (18050224)
292.5 |	3.53596c(18051924)	3.05949c(18051924)	2.46549c(18051924)	1.91486c(18051924)
315.0 |	4.10357 (18052024)	3.88622 (18052024)	3.13757 (18052024)	2.27774 (18052024)
337.5 |	2.17065 (18052024)	1.82215 (18052024)	1.48626 (18052224)	1.20095 (18040624)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	8.03330 (18042924)	11615.01	11670.91	7.18848 (18050924)
11328.00	11728.00	8.64860 (18041424)	11040.99	11670.91	10.44679 (18042624)
11328.00	9978.00	3.76694 (18052824)	11710.68	10054.12	3.52485 (18040824)
12035.11	10270.89	4.66241 (18040824)	12251.88	10595.32	4.49730 (18040824)
12328.00	10978.00	5.31916 (18040324)	12035.11	11685.11	6.20522 (18042924)
11710.68	11901.88	6.11467 (18041424)	11328.00	11978.00	7.13759 (18041424)
10945.32	11901.88	8.55906 (18042624)	10620.89	11685.11	14.12556 (18053024)
10404.12	11360.68	15.13861 (18052024)	10620.89	10270.89	7.25456 (18052824)
10945.32	10054.12	7.61740 (18052824)	11363.31	10816.90	11.57423c (18030124)
14662.73	11118.76	2.86583c (18041324)	10876.32	17523.53	2.78971 (18052524)
11444.70	12436.35	5.86988 (18041424)	13292.04	12707.34	4.30130 (18041824)
11423.82	9111.71	1.67207 (18052824)	8484.59	9517.75	3.81958 (18052924)
9118.69	16434.20	1.69820 (18052224)			

: A-137 :

ANNEXURE : XXIII CONTD.

ANNEXURE : XXIII CONTD.

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,
DG-08 ,DG-09 ,DG-10 ,DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,

RANK (XR,YR) OF TYPE	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR
1.	15.13861(18052024) AT (10404.12, 11360.68) DC	26. 8.15515(18050324) AT (11040.99, 11670.91) DC			
2.	14.55828(18051924) AT (10404.12, 11360.68) DC	27. 8.14502(18040824) AT (11363.31, 10816.90) DC			
3.	14.12556(18053024) AT (10620.89, 11685.11) DC	28. 8.12820(18052224) AT (10620.89, 11685.11) DC			
4.	11.95288(18052324) AT (10620.89, 11685.11) DC	29. 8.12352(18052124) AT (10620.89, 11685.11) DC			
5.	11.63587(18052424) AT (10404.12, 11360.68) DC	30. 8.11965(18052724) AT (11363.31, 10816.90) DC			
6.	11.57423(18030124) AT (11363.31, 10816.90) DC	31. 8.09234(18042624) AT (10620.89, 11685.11) DC			
7.	11.02167(18033024) AT (10404.12, 11360.68) DC	32. 8.04738(18051724) AT (11363.31, 10816.90) DC			
8.	11.00287(18052424) AT (10620.89, 11685.11) DC	33. 8.03330(18042924) AT (11858.33, 11508.33) DC			
9.	10.44679(18042624) AT (11040.99, 11670.91) DC	34. 7.97011(18052024) AT (10620.89, 11685.11) DC			
10.	10.23040(18041424) AT (11040.99, 11670.91) DC	35. 7.94333(18050824) AT (11040.99, 11670.91) DC			
11.	10.18084(18032924) AT (10404.12, 11360.68) DC	36. 7.90951(18032224) AT (11040.99, 11670.91) DC			
12.	9.70992(18053024) AT (10404.12, 11360.68) DC	37. 7.88480(18041724) AT (11363.31, 10816.90) DC			
13.	9.66001(18052524) AT (11040.99, 11670.91) DC	38. 7.88387(18050424) AT (11040.99, 11670.91) DC			
14.	9.38530(18041624) AT (11363.31, 10816.90) DC	39. 7.87693(18042824) AT (11040.99, 11670.91) DC			
15.	9.10538(18032724) AT (11040.99, 11670.91) DC	40. 7.84191(18052524) AT (10945.32, 11901.88) DC			
16.	8.99448(18033124) AT (11363.31, 10816.90) DC	41. 7.81699(18051524) AT (11040.99, 11670.91) DC			
17.	8.83420(18052524) AT (10620.89, 11685.11) DC	42. 7.80774(18051824) AT (10404.12, 11360.68) DC			
18.	8.68023(18053024) AT (10267.34, 12038.66) GP	43. 7.70108(18051124) AT (11040.99, 11670.91) DC			
19.	8.64860(18041424) AT (11328.00, 11728.00) DC	44. 7.61740(18052824) AT (10945.32, 10054.12) DC			
20.	8.55906(18042624) AT (10945.32, 11901.88) DC	45. 7.59812(18032724) AT (10945.32, 11901.88) DC			
21.	8.53130(18040324) AT (11363.31, 10816.90) DC	46. 7.54080(18050724) AT (11040.99, 11670.91) DC			
22.	8.48213(18052324) AT (11040.99, 11670.91) DC	47. 7.51419(18050624) AT (11040.99, 11670.91) DC			
23.	8.31569(18040624) AT (10620.89, 11685.11) DC	48. 7.46622(18042924) AT (11363.31, 10816.90) DC			
24.	8.23509(18051324) AT (11040.99, 11670.91) DC	49. 7.39888(18050124) AT (10404.12, 11360.68) DC			
25.	8.23414(18030824) AT (11363.31, 10816.90) DC	50. 7.39800(18032424) AT (10620.89, 11685.11) DC			

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,DG-08 ,DG-09 ,DG-10 ,
DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,

**** CONC OF NO2 IN MICROGRAMS/M**3 ****

DIRECTION | (DEGREES) |	DISTANCE (METERS)			
	1500.00	2000.00	2500.00	3000.00
360.0 |	30.78043(18041424)	24.61416(18032724)	19.28106(18032724)	18.57187(18052124)
22.5 |	33.03157(18041424)	26.41319(18041424)	20.53733(18041424)	18.77362(18030524)
45.0 |	29.46972(18041824)	25.69810(18041824)	21.25394(18030924)	20.11953(18030924)
67.5 |	42.76181(18041624)	41.07779(18041624)	36.33771(18041624)	33.02915(18041624)
90.0 |	21.85565(18051024)	17.26303(18041324)	17.62305(18041324)	14.82666(18041324)
112.5 |	20.32211(18041124)	19.44318(18043024)	14.99404(18043024)	12.30070(18040824)
135.0 |	18.14956(18040824)	13.01846(18040824)	10.10117(18040824)	8.34196(18040824)
157.5 |	12.76826(18040924)	10.16115(18040924)	8.86460(18052724)	8.08217(18052724)
180.0 |	14.96493(18052824)	10.56160(18052824)	8.12159(18031324)	7.07368(18031324)
202.5 |	26.98137(18052824)	18.26845(18052824)	12.25220(18052824)	11.26977(18030224)
225.0 |	13.07137(18052924)	9.79888(18052924)	8.10784(18052924)	6.99532(18052924)
247.5 |	39.85143(18052924)	28.23784(18052924)	21.98158(18052924)	17.59972(18052924)
270.0 |	34.72469(18050224)	27.96336(18050224)	20.60206(18050224)	16.25791(18052824)
292.5 |	42.12181(18052424)	28.53815(18052424)	26.61489(18051924)	24.67277(18051924)
315.0 |	51.27556(18053024)	34.23483(18053024)	26.81795(18053024)	24.49869(18052024)
337.5 |	32.84319(18042624)	23.34123(18052124)	16.95958(18052024)	15.12623(18052024)

DIRECTION | DISTANCE (METERS)
(DEGREES) | 4000.00 5000.00 7000.00 10000.00

360.0 |	19.09280(18052524)	19.60646(18052524)	19.82058(18052524)	17.19726(18052524)
22.5 |	13.54836(18041424)	12.64719(18032724)	12.95623(18032724)	12.65114(18032724)
45.0 |	17.24903(18030924)	15.17619(18030924)	11.98857(18030924)	9.40468(18030424)
67.5 |	28.59527(18041624)	25.60092(18041624)	21.34517(18041624)	16.45874(18041624)
90.0 |	13.43805(18051224)	12.09606(18051224)	10.41895(18040824)	9.71369(18040824)
112.5 |	11.80138(18040824)	9.67300(18040824)	6.96227(18051324)	5.71629(18051324)
135.0 |	7.82620(18040924)	7.71547(18040924)	7.37712(18040924)	6.63973(18040924)
157.5 |	6.59256(18052724)	4.85032(18052724)	2.79869(18052724)	1.49661(18052724)
180.0 |	5.44373(18031324)	4.32702(18031324)	4.10790(18050324)	3.03707(18050324)
202.5 |	9.83245(18030224)	9.27520(18030224)	7.24697(18050524)	4.93593(18050524)
225.0 |	5.54902(18052924)	4.61205(18052924)	3.49576(18031724)	2.47794(18052924)
247.5 |	11.52509(18052924)	7.95345(18052924)	5.34479(18052124)	3.86253(18052124)
270.0 |	10.14299(18050224)	7.54597(18050224)	5.00888(18050224)	3.34978(18050224)
292.5 |	20.81711(18051924)	18.07268(18051924)	14.61797(18051924)	11.38225(18051924)
315.0 |	24.30870(18052024)	22.92708(18052024)	18.60185(18052024)	13.63070(18052024)
337.5 |	12.95592(18052024)	10.84378(18052024)	8.72548(18052224)	7.05869(18040624)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
11858.33	11508.33	48.42952(18042924)	11615.01	11670.91	43.24585(18050924)
11328.00	11728.00	52.60185(18041424)	11040.99	11670.91	63.64296(18042624)
11328.00	9978.00	22.62572(18052824)	11710.68	10054.12	21.09829(18040824)
12035.11	10270.89	28.01559(18040824)	12251.88	10595.32	25.92983(18040824)
12328.00	10978.00	30.90114(18051024)	12035.11	11685.11	37.66767(18042924)
11710.68	11901.88	37.07820(18041424)	11328.00	11978.00	43.23056(18041424)
10945.32	11901.88	51.73031(18042624)	10620.89	11685.11	85.92801(18053024)
10404.12	11360.68	86.93647(18052024)	10620.89	10270.89	44.98275(18052824)
10945.32	10054.12	45.82749(18052824)	11363.31	10816.90	68.87943(18030124)
14662.73	11118.76	16.35818(18041324)	10876.32	17523.53	16.47278(18052524)
11444.70	12436.35	36.14922(18041424)	13292.04	12707.34	26.12469(18041824)
11423.82	9111.71	9.89222(18052824)	8484.59	9517.75	23.41212(18052924)
9118.69	16434.20	10.07743(18052224)			

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): DG-01 ,DG-02 ,DG-03 ,DG-04 ,DG-05 ,DG-06 ,DG-07 ,
DG-08 ,DG-09 ,DG-10 ,DG-11 ,DG-12 ,DG-13 ,DG-14 ,DG-15 ,DG-16 ,DG-17 ,

RANK (XR,YR) OF TYPE	CONC (YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YYMMDDHH) AT	RECEPTOR
1.	86.93647(18052024) AT (10404.12, 11360.68) DC	26. 49.81935(18030824) AT (11363.31, 10816.90) DC			
2.	85.92801(18053024) AT (10620.89, 11685.11) DC	27. 49.32694(18040624) AT (10620.89, 11685.11) DC			
3.	83.67211(18051924) AT (10404.12, 11360.68) DC	28. 48.72190(18050824) AT (11040.99, 11670.91) DC			
4.	72.06563(18052324) AT (10620.89, 11685.11) DC	29. 48.68719(18052124) AT (10620.89, 11685.11) DC			
5.	68.87943(18030124) AT (11363.31, 10816.90) DC	30. 48.47722(18032224) AT (11040.99, 11670.91) DC			
6.	68.68933(18052424) AT (10404.12, 11360.68) DC	31. 48.42952(18042924) AT (11858.33, 11508.33) DC			
7.	67.68788(18052424) AT (10620.89, 11685.11) DC	32. 48.40048(18052724) AT (11363.31, 10816.90) DC			
8.	63.64296(18042624) AT (11040.99, 11670.91) DC	33. 48.15697(18052024) AT (10620.89, 11685.11) DC			
9.	63.59311(18041424) AT (11040.99, 11670.91) DC	34. 48.13799(18042624) AT (10620.89, 11685.11) DC			
10.	63.11734(18030224) AT (10404.12, 11360.68) DC	35. 48.13630(18052224) AT (10620.89, 11685.11) DC			
11.	59.75273(18032924) AT (10404.12, 11360.68) DC	36. 48.05520(18041724) AT (11363.31, 10816.90) DC			
12.	58.36026(18052524) AT (11040.99, 11670.91) DC	37. 48.01923(18042824) AT (11040.99, 11670.91) DC			
13.	57.08375(18053024) AT (10404.12, 11360.68) DC	38. 47.88001(18050424) AT (11040.99, 11670.91) DC			
14.	56.59300(18041624) AT (11363.31, 10816.90) DC	39. 47.41701(18052524) AT (10945.32, 11901.88) DC			
15.	55.12944(18032724) AT (11040.99, 11670.91) DC	40. 47.18372(18051724) AT (11363.31, 10816.90) DC			
16.	54.37151(18033124) AT (11363.31, 10816.90) DC	41. 47.10810(18051124) AT (11040.99, 11670.91) DC			
17.	52.60185(18041424) AT (11328.00, 11728.00) DC	42. 47.03703(18051524) AT (11040.99, 11670.91) DC			
18.	51.97354(18052324) AT (11040.99, 11670.91) DC	43. 46.40720(18032724) AT (10945.32, 11901.88) DC			
19.	51.73031(18042624) AT (10945.32, 11901.88) DC	44. 46.38150(18050724) AT (11040.99, 11670.91) DC			
20.	51.49629(18040324) AT (11363.31, 10816.90) DC	45. 45.94353(18050624) AT (11040.99, 11670.91) DC			
21.	51.27556(18053024) AT (10267.34, 12038.66) GP	46. 45.92407(18051824) AT (10404.12, 11360.68) DC			
22.	50.39259(18052524) AT (10620.89, 11685.11) DC	47. 45.82749(18052824) AT (10945.32, 10054.12) DC			
23.	50.20427(18050324) AT (11040.99, 11670.91) DC	48. 44.98275(18052824) AT (10620.89, 10270.89) DC			
24.	50.08696(18040824) AT (11363.31, 10816.90) DC	49. 44.79301(18042024) AT (11363.31, 10816.90) DC			
25.	50.03341(18051324) AT (11040.99, 11670.91) DC	50. 44.17633(18032424) AT (10620.89, 11685.11) DC			

CALINE4 : CALIFORNIA LINE SOURCE DISPERSION MODEL - VERSION 2.1, DATED JUNE 1989
 RUN: RURAL HIGHWAY

I. SITE VARIABLES

U= 2.5 M/S Z0= 10. CM ALT= 0. (M) BRG= 180.0 DEGREES VD= 0.0 CM/S CLAS= 2 (B) VS= 0.0 CM/S
 MIXH= 900. M AMB= 0.0 PPM SIGTH= 10. DEGREES TEMP= 31.5 DEGREE (C)

II. LINK VARIABLES

The modelling has been done for raw material and finished product transportation by trucks having carrying capacity of 20 T and 25 T. The section wise total number of trucks has been calculated as given below:

Summary of truck transportation (to & fro trucks per day)	SECTION-2 (Only for PH-1)			SECTION-1 (Only for PH-1)			SECTION-3 (Only for PH-1)		
	50% 20T	50% 25 T	100% Total	50% 20T	50% 25 T	100% Total	50% 20T	50% 25 T	100% Total
1. Due to raw materials									
(a) with South African Coal (with equivalent coal input reduction in washery, Coal from DRI purchased from outside)	1050	840	1890	0	0	0	90	72	162
(b) with India Coal (when equivalent coal comes from washery to DRI internally)	1172	938	2110	1056	844	1900	120	96	216
(c) LSHS for reheating & other uses	0	10	10						
2. Solid waste									
Reused Outside plant boundary	140		140	140		140	0		0
Disposed Outside plant boundary	0		0	0		0	0		0
3. Product	0	318	318	0	318	318	0	0	0
GRAND TOTAL (for Indian coal)	1312	1266	2578	1196	1162	2358	120	96	216

Weighted average emission rates (g/mile/vehicle)

PM10	0.938910798	0.938919	0.938681
PM2.5	0.263400302	0.263403	0.263326
SO2	2.706210209	2.706262	2.7048
NO2	19.04370147	19.04407	19.03378

The MODE has been set CO for calculating SO2 concentrations.

FIG 1 : ROUTE MAP

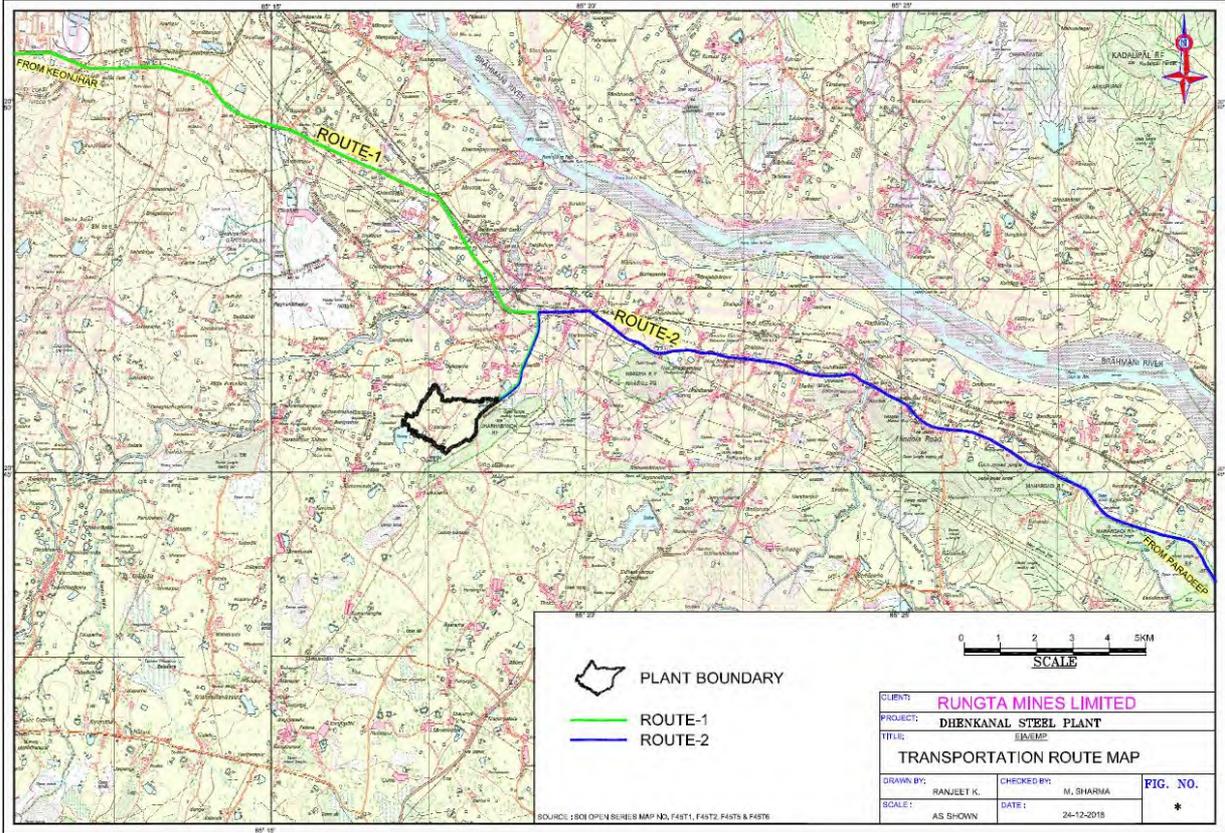
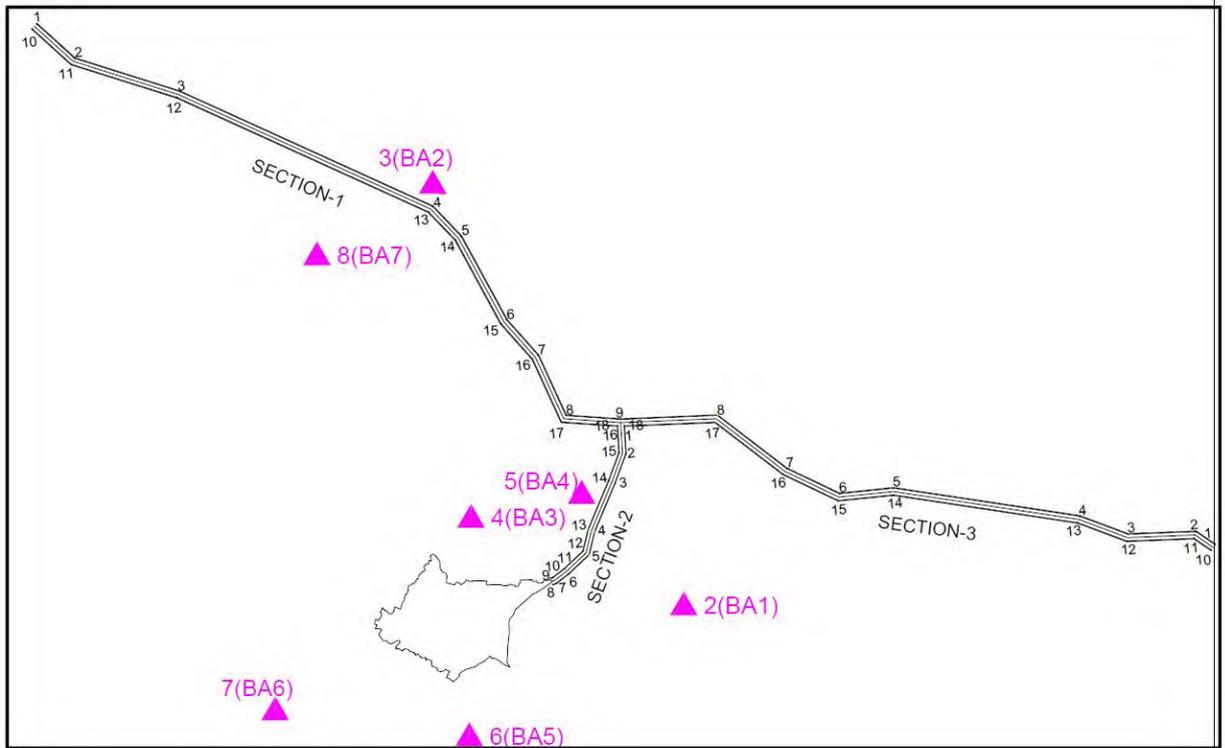


FIG 2 : SECTION AND RECEPTOR MAP



ANNEXURE : XXIV Contd..

The details of each section (S1 to S3) is given below:

Section	Link	LINK COORDINATES (M)				TYPE	VPH	EF (G/MI)				H (M)	W (M)
		X1	Y1	X2	Y2			PM ₁₀	PM _{2.5}	SO ₂	NO _x		
S01	A.	4868	19956	5450	19425	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	B.	5450	19425	7041	18919	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	C.	7041	18919	10841	17178	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	D.	10841	17178	11261	16737	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	E.	11261	16737	11946	15464	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	F.	11946	15464	12423	14925	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	G.	12423	14925	12849	13991	AG	2358	0.9	0.3	2.706	19.04	0	19.5
	H.	12849	13991	13708	13932	AG	2358	0.9	0.3	2.706	19.04	0	19.5
S02	A.	13708	13932	13736	13470	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	B.	13736	13470	13573	13028	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	C.	13573	13028	13266	12287	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	D.	13266	12287	13186	11952	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	E.	13186	11952	12889	11670	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	F.	12889	11670	12711	11533	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	G.	12711	11533	12670	11519	AG	2578	0.9	0.3	2.706	19.04	0	10.0
	H.	13708	13932	13736	13470	AG	2578	0.9	0.3	2.706	19.04	0	10.0
S03	A.	22642	12037	22371	12223	AG	216	0.9	0.3	2.706	19.04	0	19.5
	B.	22371	12223	21348	12184	AG	216	0.9	0.3	2.706	19.04	0	19.5
	C.	21348	12184	20613	12461	AG	216	0.9	0.3	2.706	19.04	0	19.5
	D.	20613	12461	17821	12885	AG	216	0.9	0.3	2.706	19.04	0	19.5
	E.	17821	12885	16998	12800	AG	216	0.9	0.3	2.706	19.04	0	19.5
	F.	16998	12800	16184	13192	AG	216	0.9	0.3	2.706	19.04	0	19.5
	G.	16184	13192	15150	13990	AG	216	0.9	0.3	2.706	19.04	0	19.5
	H.	15150	13990	13708	13932	AG	216	0.9	0.3	2.706	19.04	0	19.5

RECEPTOR WISE RESULTS

The receptors have been assumed at a distance of 50 m from the road and receptor wise results are listed below:

Sec. No.	Receptor No	CO-Ordinates (m)			PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	
		X	Y	Z					
S01	1	4909	20001	1.5	15.200	4.300	52.05	26.91	
	2	5481	19478	1.5	13.400	3.800	45.38	23.70	
	3	7062	18975	1.5	13.700	3.800	46.71	24.13	
	4	10877	17228	1.5	15.800	4.400	54.72	27.76	
	5	11310	16772	1.5	16.600	4.600	57.39	29.26	
	6	11996	15499	1.5	15.900	4.400	54.72	27.98	
	7	12474	14958	1.5	16.700	4.700	57.39	29.47	
	8	12889	14049	1.5	13.000	3.600	44.05	22.85	
	9	13709	13992	1.5	6.000	1.700	20.02	10.46	
	10	4828	19912	1.5	0.000	0.000	0.00	0.00	
	11	5420	19371	1.5	0.000	0.000	0.00	0.00	
	12	7019	18863	1.5	0.000	0.000	0.00	0.00	
	13	10806	17128	1.5	0.000	0.000	0.00	0.00	
	14	11212	16701	1.5	0.000	0.000	0.00	0.00	
	15	11897	15430	1.5	0.000	0.000	0.00	0.00	
	16	12372	14892	1.5	0.000	0.000	0.00	0.00	
	17	12809	13934	1.5	0.000	0.000	0.00	0.00	
	18	13658	13875	1.5	0.000	0.000	0.00	0.00	
		BA2	10876	17524	1.5	4.200	1.200	14.68	7.26
		BA7	9119	16434	1.5	0.000	0.000	0.00	0.00
S02	19	13766	13874	1.5	6.200	1.700	21.36	10.89	
	20	13790	13462	1.5	0.000	0.000	0.00	0.00	
	21	13623	13009	1.5	0.000	0.000	0.00	0.00	
	22	13317	12270	1.5	0.000	0.000	0.00	0.00	
	23	13234	11924	1.5	0.000	0.000	0.00	0.00	
	24	12923	11629	1.5	0.000	0.000	0.00	0.00	
	25	12737	11485	1.5	0.000	0.000	0.00	0.00	
	26	12687	11468	1.5	0.000	0.000	0.00	0.00	
	27	13658	13875	1.5	5.500	1.500	18.69	9.61	
	28	13682	13478	1.5	14.800	4.200	50.72	26.27	
	29	13523	13048	1.5	14.600	4.100	50.72	25.84	
	30	13215	12303	1.5	13.200	3.700	45.38	23.28	
	31	13138	11980	1.5	13.700	3.900	46.71	24.35	
	32	12854	11710	1.5	12.700	3.600	44.05	22.42	
	33	12685	11581	1.5	10.500	2.900	36.04	18.37	
	34	12652	11569	1.5	0.000	0.000	0.00	0.00	
		BA4	13292	12707	1.5	7.800	2.200	26.69	13.67
S03	35	22676	12086	1.5	0.000	0.000	0.00	0.00	
	36	22389	12284	1.5	1.400	0.400	5.34	2.35	
	37	21357	12245	1.5	1.300	0.400	4.00	2.35	
	38	20628	12519	1.5	1.300	0.400	4.00	2.35	
	39	17823	12945	1.5	1.300	0.400	4.00	2.35	
	40	17009	12861	1.5	1.300	0.400	4.00	2.35	
	41	16216	13243	1.5	1.400	0.400	4.00	2.35	
	42	15169	14051	1.5	1.400	0.400	5.34	2.56	
	43	13709	13992	1.5	0.700	0.200	2.67	1.28	
	44	22608	11987	1.5	0.000	0.000	0.00	0.00	
	45	22353	12163	1.5	0.000	0.000	0.00	0.00	
	46	21338	12124	1.5	0.000	0.000	0.00	0.00	
	47	20597	12402	1.5	0.000	0.000	0.00	0.00	
	48	17820	12825	1.5	0.000	0.000	0.00	0.00	

Sec. No.	Receptor No	CO-Ordinates (m)			PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³
		X	Y	Z				
	49	16988	12738	1.5	0.000	0.000	0.00	0.00
	50	16152	13141	1.5	0.000	0.000	0.00	0.00
	51	15130	13929	1.5	0.000	0.000	0.00	0.00
	52	13766	13874	1.5	0.000	0.000	0.00	0.00
	MAX				16.700	4.700	57.39	29.47

SUMMARY OF MAXIMUM RESULTS

Section	Actual (µg/m ³)	Receptor No.	Section
PM ₁₀	16.7	7	S1
PM _{2.5}	4.70	5,7	S1
SO ₂	57.39	7	S1
NO _x	29.47	7	S1

BACKGROUND NOTES

Emissions from trucks as per norms

Emission standards for new heavy-duty engines—applicable as per Bharat Stage IV (applicable nation wide since April 2017).

EU Emission Standards for Heavy-Duty Diesel Engines: Steady-State Testing

Stage	Date	Test	CO	HC	NO _x	PM	PN	Smoke
			g/kWh				1/kWh	1/m
Euro III	1999.10 EEV only	ESC & ELR	1.5	0.25	2	0.02		0.15
	2000.1		2.1	0.66	5	0.10a		0.8
Euro IV	2005.1		1.5	0.46	3.5	0.02		0.5
Euro V	2008.1		1.5	0.46	2	0.02		0.5
Euro VI	2013.01	WHSC	1.5	0.13	0.4	0.01	8.0×10 ¹¹	

a- PM = 0.13 g/kWh for engines < 0.75 dm³ swept volume per cylinder and a rated power speed > 3000 min⁻¹

Calculation for Emission from tipping trucks of 20T capacity which will be plying

Truck capacity 20 Te. of 24 Hours/day (operational)
vehicle speed 40 Km/hr 178 HP/truck

Units	NO _x	PM	SO ₂
	g/kWh (Stage : Euro IV)		
Capacity of Diesel Engine Emission permitted	3.5	0.02	
Resultant KWH	KWH	135.28	135.28
Emission from one truck	g/truck/hour	473.48	2.7056
Emission from 1 truck/km	g/km	11.837	0.0676
Emission from 1 truck/mile	g/mile	18.9392	0.1082

Calculation for Emission from tipping trucks of 25T capacity which will be plying

Truck capacity 25 Te. of 24 Hours/day (operational)
vehicle speed 40 Km/hr 180 HP/truck

Units	NO _x	PM	SO ₂
	g/kWh (Stage : Euro IV)		
Capacity of Diesel Engine Emission permitted	3.5	0.02	
Resultant KWH	KWH	136.8	136.8
Emission from one truck	g/truck/hour	478.8	2.736
Emission from 1 truck/km	g/km	11.97	.0684
Emission from 1 truck/mile	g/mile	19.152	0.1094

ANNEXURE : XXIV Contd..

As per AP-42, 5th Edition of US EPA, Section 13.2.1.3, the quantity of particulate emissions from re-suspension of loose material on the road surface due to vehicle travel on a dry paved road may be estimated using the following empirical expression:

$$E = [k (sL)^{0.91} \times (W)^{1.02}] \times (1-P/4N)$$

- where: E = particulate emission factor (having units matching the units of k),
 k = particle size multiplier for particle size range and units of interest, which will be 0.62 g/VKT for PM₁₀ and 0.15 g/VKT for PM_{2.5} as per Table 13.2.1-1 of AP-42, US EPA.
 sL = road surface silt loading (grams per square meter) (g/m²). The average silt content has been taken as 0.03 g/m² as per Table 13.2.1-2 of AP-42, US EPA..
 W = average weight (tons) of the vehicles travelling the road, which is 20 T and 25 T (average of loaded and empty trucks) for the traffic.
 P = Total wet days with at least 0.254 mm (0.01 in) of precipitation during the averaging period which is 60 days at IMD Anugul (avg. from 1981-2010), and
 N = Number of days in the averaging period which is 365 days

Standards for Ambient air quality

Pollutants	Concentration of ambient air (All concentrations are micro g/m ³ except for CO in mg/m ³) for 24 hours average		
	Industrial area	Residential, Rural & other areas	Sensitive area
Sulphur Dioxide (SO ₂)	120	80	30
Oxides of Nitrogen as NO _x	120	80	30
Suspended Particulate Matter (SPM)	500	200	100
Respirable Particulate Matter (RPM)	150	100	75
Lead (Pb)	1.5	1.00	0.75
Carbon Monoxide (CO)- 8 hr	5.0	2.0	1.0
1 hr	10.0	4.0	2.0

**RUNGTA MINES LIMITED
DHENKANAL STEEL PLANT**

FORM – 31

[Prescribed under Schedule XVIII to Rule 96]

HEALTH REGISTER

Sl. No.	Particular	
1	Sl. No.	
2	Deptt./Works	
3	Name of Worker	
4	Sex	
5	Age (at last birth day)	
6	Date of employment	
7	Date of leaving or transfer to other work with reasons for discharge or transfer	
8	Nature of job or occupation	
9	Raw materials, products or by products likely to be exposed to	
10	Date	
11	Results	
12	Signs and symptoms observed during examination	
13	Nature of tests and results thereof	
14	If declared unfit for work state period of suspension with reasons in details	
15	Whether certificate of unfitness issued to the worker	
16	Re-certificated fit to resume duty on	
17	Signature of the Certifying Surgeon with date	

FORM No. 31 - A
HEALTH RECORD
(Pre-employment / Periodical)
[Prescribed under Rule - 62 - I]

1. Name of the factory :
2. Name of the employee :
3. Employee distinguishing number :
4. Age of the employee :
Identification Mark :
nature of job :
5. Date of 1st employment :
6. Length of service in years :
7. General Survey :
Health : Good/ Fair/ Poor
Height : cms.
Weight : Kg.
8. Blood Group :
9. Eye Vision : Normal / Abnormal
Use of glass - Yes / No
10. Hearing : Normal / Abnormal
11. Respiratory System : Chest measurement
Inspiration
Expiration
Respiration rate / min.
Remarks if any
12. Cardiovascular systems :
Pulse rate
B. P.
Heart Sound, remarks if any
13. Abdomen Tenderness : Yes / No.

- 14. Nervous System : History of Fits - Yes / No
Epilepsy - Yes / No
Remarks on
Mental health -

- 15. Locometer System : Normal / Abnormal

- 16. Skin Condition : Normal / Abnormal

- 17. Hernia : Present / Absent

- 18. Hydrocele : Present / Absent

- 19. Present complain if any :

- 20. Summary of findings :
Heart disease
Hypertension
Diabetes
T. B.
Epilepsy
Poisoning
Others
Occupational diseases, if any

- 21. Recommendation, if any for any further investigation :

Signature of the employee

Signature of the Medical officer



Rungta Mines Limited

RUNGTA HOUSE, CHAIBASA - 833 201, JHARKHAND

Phone : (06582) 256761, E-mail : rungtas@rungtamines.com

CERTIFIED TRUE COPY OF THE EXTRACT OF THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF RUNGTA MINES LIMITED IN THEIR 8TH MEETING HELD FOR THE FINANCIAL YEAR 2018-19 ON MONDAY 10TH DECEMBER, 2018 AT 11:00 A.M. AT ITS REGISTERED OFFICE AT 8A, EXPRESS TOWER, 42A, SHAKESPEARE SARANI, KOLKATA- 700017

ITEM NO.- 6 To adopt and comply with the Corporate Environment Policy formulated by the Company for its Dhenkanal Steel Plant

The Chairman informed the Board that the Company has formulated the Corporate Environment Policy for its Dhenkanal Steel Plant situated at Dist.- Dhenkanal, Odisha by preparing therein a comprehensive Environmental Management System so that all regulatory and statutory requirements are complied with including the norms / stipulations of Environment Clearance. After perusing and discussing in detail the contents of the draft of Environment Policy the board passed the following resolution unanimously:

“RESOLVED THAT the Corporate Environment Policy formulated for its Dhenkanal Steel Plant situated at Dist.- Dhenkanal, Odisha by the Company be and is hereby approved and adopted by the Board to meet with all the regulatory and statutory requirements including the norms/conditions / stipulations of Environment Clearance.

RESOLVED FURTHER THAT the board will monitor to implement the provisions of the Policy by getting periodical audit of the existing Environmental Management System and the necessary remedial measures required to be taken by the Board thereto.

RESOLVED FURTHER THAT the said Environment Policy includes the policy of System of reporting of any non-compliance or violation of the provisions of the Policy to the board of directors of the Company, establishment of hierarchial system to deal with the environmental issues for ensuring compliance of the provisions of the said Policy as well as Standards set for the operating process/procedures for addressing any deviation / violation of the provisions of the Policy.

RESOLVED FURTHER THAT Shri Mahesh Dutt Rustagi, one of the Directors (Din-01219014) of the Company, be and is hereby authorised by the Board to sign and submit the said Corporate Environment Policy of the Company prepared for its Dhenkanal Steel Plant, Odish to the Ministry of Environment, Forest and Climate Change (MOEF) whenever it is required to be done on behalf of the Company.”

For Rungta Mines Limited

(MUKUND RUNGTA)

Director

DIN- 00072640



Rungta Mines Limited

MAIN ROAD, BARBIL - 758 035, DIST. - KENDUJHAR, ODISHA, INDIA

Telefax : 06767 - 276651, E-mail : bbloffice@runtamines.com

CORPORATE ENVIRONMENTAL POLICY

The Board of Directors of the Company in their meeting held on 10.12.2018 deliberated on the agenda regarding Corporate Environmental Policy of Dhenkanal Steel Plant of the Company in Odisha and passed the resolution that M/s Rungta Mines Limited shall strive to ensure that all aspects of the business could have the least harmful effect on the Environment by implementing an effective Environmental Management System to:

- Have full awareness of all Environmental and Factory legislation in India and to ensure that regulatory requirements are duly met with including the conditions/ stipulations/ norms of Environment Clearance.
- Monitor the implementation of the Policy by carrying our periodic audit of compliance with full reporting to the Board of Directors and to suggest necessary remedial measures, if required, thereto.
- Ensure that all Employees in the course of their duties act in accordance with the Environmental Policy. To encourage supplies, Contractors and vendors to act in accordance with Company's Environmental Standards.
- Maintain transparency in matters of Environmental compliance.
- Selections of non polluting technology, waste minimization, reuse/recycling and the reduction of energy consumption will be particular areas of attention of the business man.
- The Company will also make a positive environmental contribution in the local community by encouraging open communication, general Environmental awareness and the promotion of CSR activities.

Place: BARBIL

Dated:10.12.2018

For Rungta Mines Limited

(M.D.RUSTAGI)

Director

(DIN – 01219014)



**National Accreditation Board for
Testing and Calibration Laboratories**
(A Constituent Board of Quality Council of India)



CERTIFICATE OF ACCREDITATION

MIN MEC R & D LABORATORY

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

A-121, Paryavaran Complex, IGNOU Road, New Delhi

in the field of

TESTING

Certificate Number TC-6337 (in lieu of T-1157)

Issue Date 08/10/2017

Valid Until 07/10/2019

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL

N. Venkateswaran
Program Director



89076970100030000381

Anil Relia
Chief Executive Officer

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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

+ LPA 108/2014 & C.M.No.2168/2014 (stay)
EPSILON PROJECTS PVT LTD Appellant

Versus

MINISTRY OF ENVIRONMENT
AND FOREST & ORS Respondents

+ LPA 110/2014 & C.M.No.2175/2014 (stay)
MIN MEC CONSULTANCY PVT LTD Appellant

Versus

MINISTRY OF ENVIRONMENT
AND FOREST & ORS Respondents

Present:- Ms.Ruchi Kohli, Adv. with Mr.Yash Mishra, Adv. for
the appellants.
Mr.Rajeeve Mehra, ASG with Mr.Sachin Datta,
Mr.Kartik, Adv. for UOI.

CORAM:
HON'BLE THE CHIEF JUSTICE
HON'BLE MR. JUSTICE RAJIV SAHAI ENDLAW

ORDER

03.02.2014

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C.M.No.2170/2014 (exemptions) in LPA 108/2014

C.M.No.2176/2014 (exemptions) in LPA 110/2014

Exemptions allowed subject to all just exceptions.

LPA No.108/2014 & C.M.No.2169/2014 (delay in filing)

LPA No.110/2014

Issue notice. Learned counsel for the respondents No.1&2 accepts
notice. Notice be also issued to remaining respondents No.2 to 5.

LPA's 108/2014 & 110/2014

page 1 of 2.

Attested True Copy
Rajiv
9/2/14
Court Master
High Court of Delhi
New Delhi

List this matter on 14th March, 2014. In the facts obtaining, we are of
the considered view that till the filing of the reply, on reasons of parity and
comity of courts and uniformity in dealing with identical cases, the appellant
shall also be allowed to prepare and present Environment Impact
Assessment (EIA) report to the Central and State Government
Environmental Appraisal Committees till 14th March, 2014

Dasti under signature of the Court Master.

Sd/-
CHIEF JUSTICE

Sd/-
RAJIV SAHAI ENDLAW, J

FEBRUARY 03, 2014
'anb'

Attested True Copy
Rajiv
9/2/14
Court Master
High Court of Delhi
New Delhi

LPA's 108/2014 & 110/2014

page 2 of 2.

: A-151 :

ANNEXURE : XXVIII

ANNEXURE : XXVIII Contd..

Subsequently the hearings at High Court of Delhi have been held on the following dates with the contents of the orders as follows:

Date	Content of order
14.03.2014	The Hon'ble Division bench could not assemble today. Renotify on 13.05.2014
13.05.2014	Re-notify for 14.08.2014,. Interim order to continue
14.08.2014	An adjournment slip is moved by the learned counsel for the appellant. Renotify on 13.11.2014.
13.11.2014	It is represented by the learned counsel for both the parties that transfer writ petitions are moved before the the Supreme Court of India for the transfer of several cases pending before different High Courts in which an identical issue is raised. Hence, we deem it appropriate to adjourn the hearing. Re-notify on 06.02.2015. Interim orders to continue.
06.02.2015	It is represented that on 16.01.2015 notice has been ordered in the Transfer Petitions by the Supreme Court. Re-notify on 25.05.2015. Interim orders to continue.
25.05.2015	It is brought to our notice that the Transfer Petition before the Supreme Court of India stands posted to 11.08.2015. Hence, call on 04.09.2015
04.09.2015	Renotify on 01.12.2015
01.12.2015	On joint request, call on 23.02.2016
23.02.2016	It is brought to our notice that the Transfer Petition(s) (Civil) Nos. 1682-1722/2014 are still pending before the Hon'ble Supreme Court of India. List on 11 th July 2016
11.07.2016	It is stated that the Transfer Petition(s) (Civil) Nos. 1682-1722/2014 before Supreme Court are still pending. Re-notify on 26.09.2016
26.09.2016	It is brought to our notice that the Transfer Petition(s) (Civil) Nos. 1682-1722/2014 are still pending before the Hon'ble Supreme Court of India. List on 20.01.2017
20.01.2017	Since the proceedings before the Supreme Court are still pending, renotify on 04.07.2017.
04.07.2017	Proceedings before the Supreme Court are still pending. Renotify on 04.12.2017.
04.12.2017	Learned counsel or the appelant states that transfer petition is still pending consideration before the Supreme Court and its is listed today before the Registrar for completion of pleadings. List on 18 th July, 2018 in the category of "directions" for reporting the orders passed by the Supreme Court. In the event, the petition before the Supreme Court is decided before the next date, a copy of the order shall be placed on record
18.07.2018	1. Hon'ble Division Bench has not assembled today as Hon'ble Ms. Justice Hima Kohli is busy attending workshop "Environmental Adjudication for the Green Bench Judges of Bhutan" to be held in Thimpu, Bhutan. 2. List on 14.11.2018
14.11.2018	Learned counsel for the appellants seeks an adjournment . At request, adjourned to 29.04.2019

The copies of the above orders can be retrieved from delhihighcourt.nic.in by typing the case no. LPA 23 of 2014.

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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

+ W.P.(C) 3665/2016

MRS. RANI GUPTA & ANR Petitioners

Through Mr. Yash Mishra with Ms.Ruchi
Kohli, Ms.Srishty Kohli and
Ms.Nidhi Jaswal, Advocates.

versus

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE
CHANGE & ANR Respondents

Through Mr.Sanjay Jain, ASG and Mr.Rajesh
Gogna, CGSC with Mr.Tushar Sannu,
Mr.Sumit Misra, Ms.Shreya Sinha
and Mr.Shreshth Jain, Advocates.

CORAM:

HON'BLE MR. JUSTICE MANMOHAN

ORDER

% **03.05.2016**

C.M.No.15700/2016

Exemption allowed, subject to all just exceptions.

Application stands disposed of.

W.P.(C) No.3665/2016 & C.M.No.15699/2016

Present writ petition has been filed challenging Notification dated 3rd March, 2016 whereby an amendment has been made to the Environmental Impact Assessment Notification, 2006 stating that the Environmental Consultant Organisations which are accredited for a particular sector and category of project for that project with the Quality Council of India (QCI) or National Accreditation Board for Education and Training (NABET) or any other agency which may be notified by the Ministry of Environment Forest and Climate Change shall be allowed to prepare the Environmental Impact Assessment

(EIA) report and Environmental Management Plan (EMP) of a project in that sector and to appear before the State or Central Expert Appraisal Committee.

Learned counsel for the petitioners states that the NABET had issued a scheme for accreditation of EIA Consultants organisations in January, 2010 and the respondent No.1 issued Office Memorandums dated 2nd December, 2009 and 18th March, 2010 stating that no final EIA or EMP prepared by non-accredited consultant would be entertained after 1st July, 2010.

He further states that petitioner No.1 submitted an application for accreditation in January, 2010. However, the same was rejected vide minutes of meeting dated 10th January, 2011 and petitioner No.1 challenged the said decision by virtue of a writ petition being W.P.(C) 7034/2012. However, the said writ petition was dismissed. The petitioner then preferred LPAs being LPA Nos.23/2014 and 110/2014, wherein the petitioners were allowed to prepare and present the Environmental Impact Assessment report to the Central and State Government Expert Appraisal Committee.

Learned counsel for the petitioners submits that the impugned notification dated 3rd March, 2016 is not only contrary to the aforesaid Division Order but also violative of Section 23 of the Environment Protection Act, 1986.

Issue notice.

Mr.Rajesh Gogna, CGSC accepts notice on behalf of the respondents. He prays for and is permitted to file a counter-affidavit within a period of four weeks. Rejoinder-affidavit, if any, be filed before the next date of hearing.

List on 12th August, 2016.

In the meantime, till the Division Bench varies, vacates or modifies the interim orders dated 17th January, 2014 and 3rd February, 2014 passed in LPA Nos.23 of 2014 and 110 of 2014, the petitioners are allowed to prepare and present Environmental Impact Assessment report to the Central and State Government Expert Appraisal Committee.

Order *dasti*.

MAY 03, 2016
KA

MANMOHAN, J

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* IN THE HIGH COURT OF DELHI AT NEW DELHI

+ W.P.(C) 3665/2016

MRS. RANI GUPTA & ANR Petitioners

Through: Mr Yash Mishra and Ms Srishty Kaul,
Advocates.

versus

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE
CHANGE & ANR Respondents

Through: Mr Rajesh Gogna, Advocate for R-1.

CORAM:

HON'BLE MR. JUSTICE SANJEEV SACHDEVA

ORDER

% 12.08.2016

W.P.(C) 3665/2016 & CM No.15699/2016(stay)

The counter-affidavits have not been filed. The respondents shall file their counter-affidavits within a period of four weeks. Rejoinders thereto, if any, be filed within four weeks thereafter.

Renotify on 14th March, 2017.

SANJEEV SACHDEVA, J

AUGUST 12, 2016

'sn'

Subsequently the hearings at High Court of Delhi have been held on the following dates with the contents of the orders as follows:

Date	Content of order
14.03.2017	Hon'ble Judge was on leave. Renotified on 21.08.2017
21.08.2017	The learned counsel for the petitioner seeks some time to file a rejoinder. Let the same be filed within a period of four weeks from today. List on 23.03.2018. Interim order to continue
23.03.2018	1. There is no representation on behalf of the parties. Adverse orders are deferred. 2. Renotify the matter on 25.09.2018
25.09.2018	It is already 5.00 p.m. The petition cannot be taken up today due to paucity of time. List on 17.04.2019. Interim order to continue.



Government of India/ भारत सरकार
Ministry of Environment, Forest & Climate Change/ पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Eastern Regional Office/ पूर्वी क्षेत्रीय कार्यालय
A/3, Chandrasekharpur/ ए/३, चन्द्रशेखरपुर
Bhubaneswar - 751 023/ भुवनेश्वर - ७५१ ०२३



Telephone: 0674- 2301213, 2301248, 2302452, 2302453. Fax: 0674-2302432. E-mail: roe2.bsr-mef@nic.in

संख्या 101-639/ई.पी.ई

/ 292.

27-06-2017

सेवा में,

परियोजना अधिकारी,
रुंगटा माइंस लिमिटेड,
झारबन्धा,
पोस्ट ऑफिस : निमाबहाली,
मेरामंडली, टंकानाल-759 121

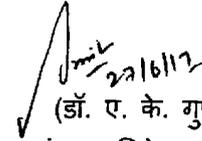
विषय : रुंगटा माइंस लिमिटेड परियोजना के अनुपालन पत्र की प्रमाणित पत्र के संबंध में ।

महोदय,

मुझे यह सूचित करने का निर्देश हुआ है कि इस कार्यालय द्वारा दिनांक 07.06.2017 को उपरोक्त परियोजना की मॉनीटरिंग की गई । इस सन्दर्भ में अनुपालन पत्र की प्रमाणित पत्र आप के आवश्यक कारवाई हेतु संगलग्न है ।

संगलग्नक: उपरोक्त

भवदीय,


(डॉ. ए. के. गुप्ता)
संयुक्त निदेशक (वै)



Government of India/ भारत सरकार
 Ministry of Environment, Forest & Climate Change/ पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
 Eastern Regional Office/ पूर्वी क्षेत्रीय कार्यालय
 A/3, Chandrasekharpur/ ए/३, चन्द्रसेखरपुर
 Bhubaneswar - 751 023/ भुवनेश्वर - ७५१ ०२३



Telephone: 0674- 2301213, 2301248, 2302452, 2302453. Fax: 0674-2302432. E-mail: roez.bsr-mef@nic.in

No.101-639/EPE

27-06-2017

Sub: Issuing of Certified Compliance Report in respect of integrated Steel Plant 1.9 MTPA, WHRB 100 MW and AFBC 200 MW at Jharbandh, Galapada & Tarakabeda Villages, District Dhenkanal, Orissa by M/s Rungta Mines Ltd.

Ref: Ministry's EC letter No. J-11011/241/2009-IA.II(I) dated 02-08-2010.

This project was monitored by the undersigned on 07.06.2017. During the visit, various officers from Rungta Mines were present viz. Shri Pradeep Kumar Chaturvedi, Joint VP, Shri P.K. Mishra, AGM (Civil), Shri G.P. Sharma, DGM (Env.), Shri I. Sridhar, DGM (DRI), Shri P.R. Aich, Environmental Assistant, Shri A.K. Nanda, AGM (Elect.) and Shri Ranjeet Kumar Sahoo, Assistant Manager. During monitoring, it has been found that they have started site development work like levelling of site, construction of plant boundary, internal road network, office, etc. from April, 2017 onwards. Therefore, detailed compliance of conditions stipulated in the EC could not be ascertained at this moment. It is noted that the project is in process to get other statutory permission from different government authorities. Basic status of compliance is as follows:

a) Land acquisition:

As on date, they have acquired 600.24 acre land out of 667.39 acre. Out of 600.24 acre acquired land 540.705 acre is private land and remaining is government land. Remaining 67.15 acre land acquisition is in process.

b) R & R Policy:

As per the EC preamble, 18 houses (54 families) will be displaced which will be rehabilitated and resettled by the project proponent as per the R & R Policy, Government of Odisha. During monitoring it has been noticed that and subsequent documents submitted by the project proponent they have rehabilitated and resettled 54 families near the project site with all basic amenities including water supply, common lighting, temple, etc. As per the information submitted, the project proponent had made payment of Rs.7 lakhs per family in lieu of construction of houses. PAs have also paid one time transportation @Rs.10000/- for transportation of their personal effect from the place of displacement to the place of reallocation. All the displaced families except one (absconding) are being paid maintenance/subsistence allowance @Rs.3400/- per month in lieu of employment as per Government norms.

c) CSR activities:

PP also conducted various CSR activities near about the project site. As they informed 178 educated unemployed youth from the affected families have already been trained in local Industrial Training Centre (ITC) for up-gradation of their skill and employability. As per information submitted by PP the details of CSR activities undertaken are listed below:

(all figures in INR)

Sl. No.	Financial year	Health services	Education and communication	Infrastructure development	Sustainable livelihood	Culture and sports	Total
1.	2009-10	309379	348669	1338610	624700	467298	3088656
2.	2010-11	1659266	4722483	1823930	1822994	3419228	13447901
3.	2011-12	426748	3046861	1207992	1693468	1298234	7673303
4.	2012-13	131208	2043672	916217	1974623	1026253	6091973
5.	2013-14	33953	583134	349355	2465958	255941	3688341
	Total	2560554	10744819	5636104	8581743	6466954	33990174

(all figures in INR)

Sl. No.	Financial year	Drinking water/health/eradicating poverty	Education, vocational training livelihood projects	Environment/ecology/NRM	Culture & Tradition/Heritage	Contribution to PMNRF & Welfare of SC,ST, OBC, etc	Rural development	Total
1.	2014-15	5958159	2674725	1588825	1311015	0	2698780	14231504
2.	2015-16	1194785	4336026	1130227	1629241	0	1634437	9924716
3.	2016-17	897577	2286963	453096	639331	1000	1879406	6166373
	Total	8050521	9297714	3172148	3579587	1000	6212623	30322593

The project was also in process to comply with the commitment made during public hearing including provision of supply of drinking water to the project affected villages (Jharbandh, Tarkabeda, Galapada) through pipelines and overhead tanks, to conduct plantation in the village. PP also committed that they will generate employment to local person based on four categories (unskilled, semi-skilled, skilled and specially skilled) during construction and operation of the project. They have also agreed to absorb 90% of unskilled employees from the local people. The project proponent has also sponsored 50 number of ITI training during the educational year in consultation with the District Employment Officer, Dhenkanal. In addition to above, PAs have also made commitment during the public hearing to take precautionary measure for control of pollution during construction as well as operation of the plant and total capital investment of environmental improvement work is envisaged as Rs.40 crore and recurring expenditure during the steel production is Rs.5 crore per year for all plant facilities.

d) Wildlife Conservation Plan:

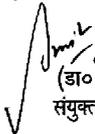
Wildlife Conservation Plan for conserving wild fauna has been prepared in consultation with the State Forest Department.

e) Statutory permissions:

They have obtained Consent to Establish (CTE) vide letter No. 13955 dated 20.08.2015 by OSPCB which is valid up to 03.01.2021. They informed that they are in process to getting permission for drawl of water from river Brahmani from Water Resources Department, Government of Odisha vide letter No.7434 dated 26.08.2013. They have also obtained permission for drawing 132 KV power line from Meramandali Sub Station to the plant.

f) Others:

They have displayed accordance of statutory permission in the company's website viz. www.rungtamines.com


27/6/17
(डा० ए० के० गुप्ता)
संयुक्त निदेशक "वे०"