

Figure K-100 Contour plot of annual mean PM_{2.5} concentrations (ventilation outlets only, 2023-DS)

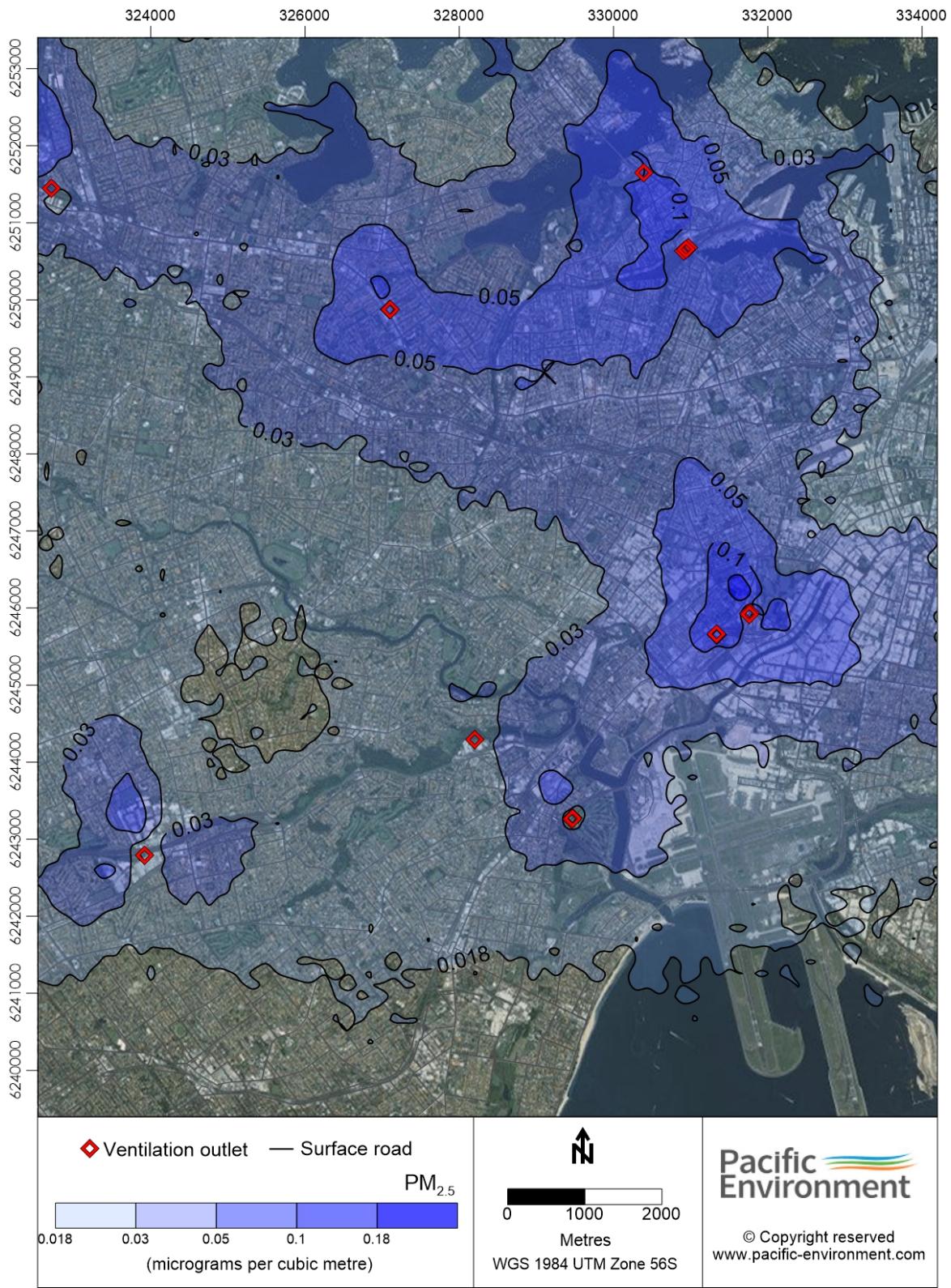


Figure K-101 Contour plot of annual mean $\text{PM}_{2.5}$ concentrations (ventilation outlets only, 2023-DSC)

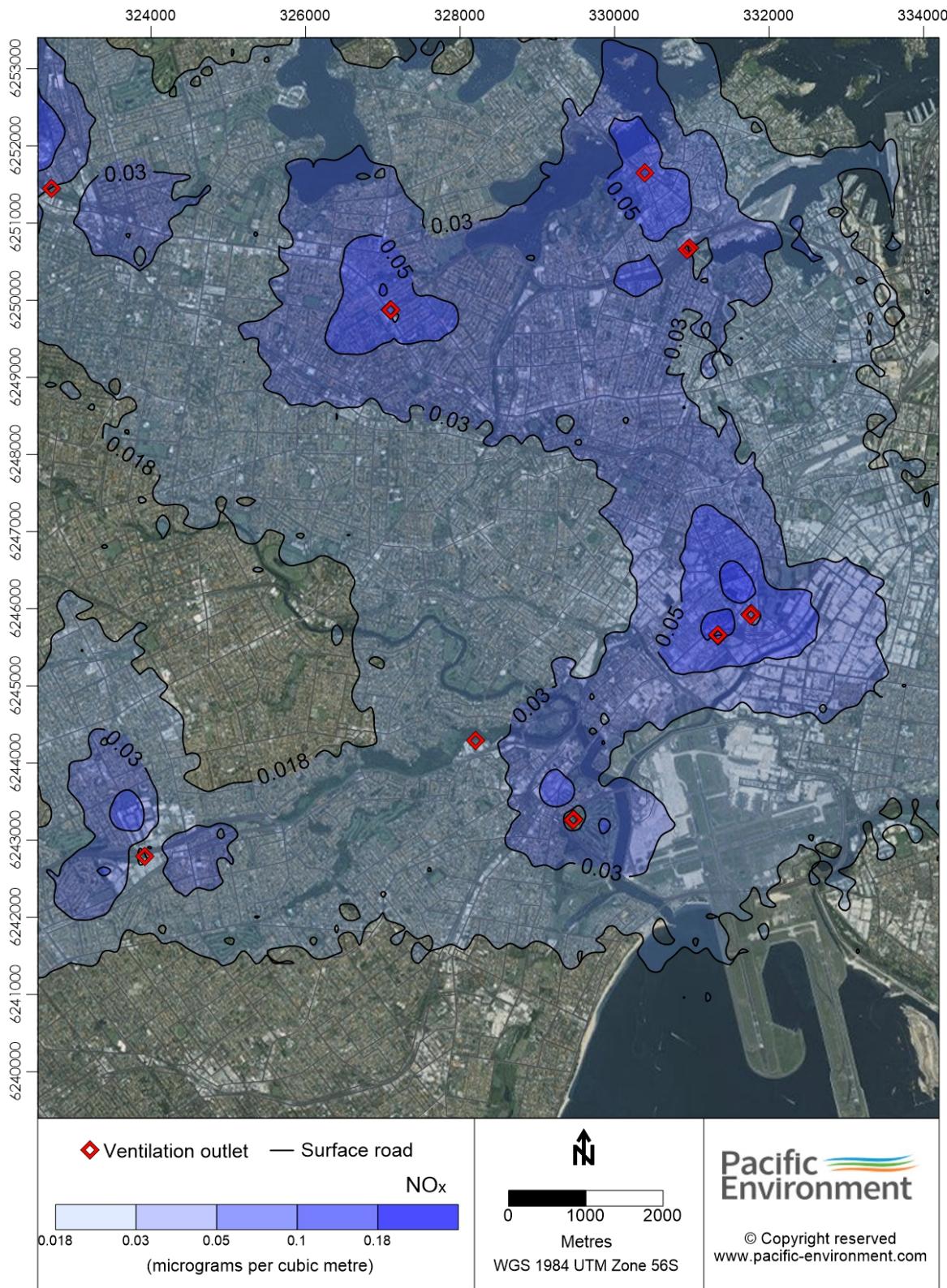


Figure K-102 Contour plot of annual mean PM_{2.5} concentrations (ventilation outlets only, 2033-DS)

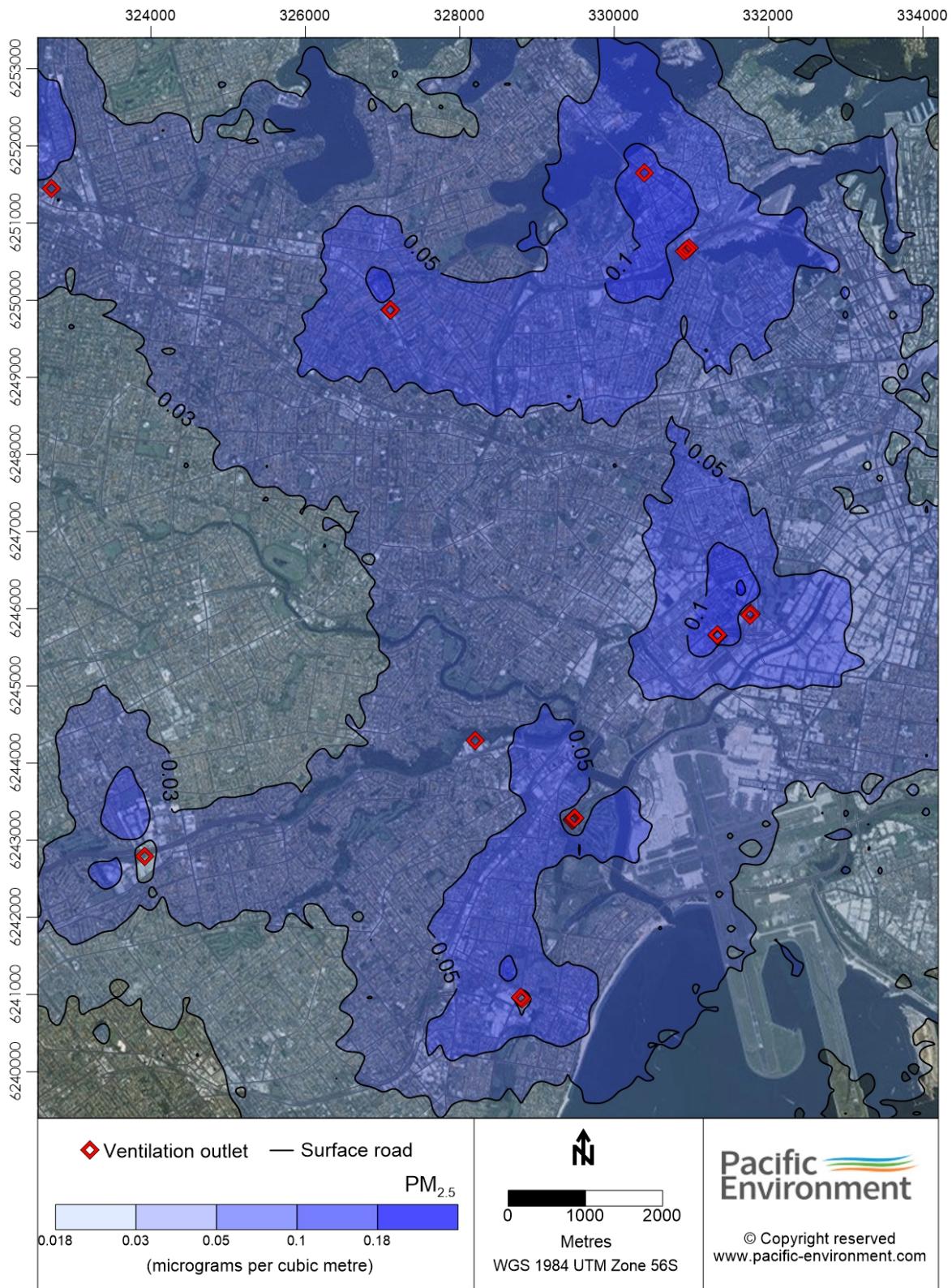


Figure K-103 Contour plot of annual mean $\text{PM}_{2.5}$ concentrations (ventilation outlets only, 2033-DSC)

K.8 PM_{2.5} (maximum 24-hour mean)

Table K-50 Maximum 24-hour PM_{2.5} concentration at community receptors

Receptor	Maximum 24-hour PM _{2.5} concentration (µg/m ³)							Change relative to Do Minimum (µg/m ³)				Change relative to Do Minimum (%)			
	2015-BY	2023-DM	2023-DS	2023-DSC	2033-DM	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
CR01	-	27.7	26.4	29.2	26.5	27.5	26.7	-1.3	1.5	1.0	0.2	-4.7%	5.4%	3.7%	0.9%
CR02	-	26.5	27.0	26.4	26.7	26.8	27.0	0.5	-0.1	0.1	0.3	1.8%	-0.4%	0.3%	1.1%
CR03	-	29.2	30.2	28.9	30.3	29.3	29.5	1.0	-0.4	-1.1	-0.8	3.4%	-1.3%	-3.5%	-2.6%
CR04	-	27.9	28.4	29.4	28.7	27.8	28.3	0.4	1.5	-0.9	-0.4	1.6%	5.3%	-3.1%	-1.4%
CR05	-	26.7	27.8	26.8	26.1	26.6	26.1	1.1	0.1	0.5	0.1	4.1%	0.5%	2.0%	0.3%
CR06	-	29.5	30.1	28.4	29.4	27.8	30.5	0.7	-1.1	-1.6	1.1	2.3%	-3.6%	-5.3%	3.9%
CR07	-	30.8	31.0	28.6	31.4	30.0	30.0	0.3	-2.2	-1.4	-1.4	0.8%	-7.0%	-4.6%	-4.4%
CR08	-	28.9	29.1	28.1	29.6	30.9	29.6	0.1	-0.8	1.3	0.0	0.5%	-2.7%	4.3%	-0.1%
CR09	-	27.6	27.5	27.8	28.4	27.8	28.7	-0.1	0.3	-0.6	0.3	-0.4%	1.0%	-2.0%	1.2%
CR10	-	36.2	32.3	34.2	33.7	34.9	33.2	-3.8	-2.0	1.1	-0.5	-10.6%	-5.4%	3.3%	-1.5%
CR11	-	28.9	27.2	28.0	27.7	28.3	27.9	-1.6	-0.9	0.6	0.2	-5.6%	-3.0%	2.3%	0.8%
CR12	-	31.8	33.9	32.0	32.7	32.0	33.0	2.2	0.2	-0.8	0.3	6.8%	0.6%	-2.3%	0.9%
CR13	-	28.0	28.2	26.7	26.6	26.3	26.7	0.2	-1.3	-0.3	0.1	0.7%	-4.8%	-1.3%	0.4%
CR14	-	29.2	27.6	27.2	27.9	27.2	29.6	-1.5	-1.9	-0.7	1.7	-5.3%	-6.7%	-2.4%	6.2%
CR15	-	27.2	27.8	28.5	26.9	27.5	27.2	0.6	1.3	0.6	0.2	2.1%	4.8%	2.0%	0.8%
CR16	-	27.9	28.2	27.7	29.7	27.5	26.3	0.3	-0.2	-2.2	-3.4	1.1%	-0.8%	-7.4%	-11.3%
CR17	-	27.7	26.3	27.5	27.1	26.4	26.2	-1.4	-0.2	-0.7	-0.9	-5.1%	-0.8%	-2.6%	-3.2%
CR18	-	26.4	26.8	27.1	26.6	27.7	26.6	0.5	0.7	1.0	0.0	1.8%	2.6%	3.9%	-0.1%
CR19	-	27.0	26.8	26.8	26.3	26.3	28.3	-0.1	-0.2	0.0	2.1	-0.5%	-0.7%	0.2%	7.9%
CR20	-	28.2	26.4	27.0	27.2	26.7	27.1	-1.8	-1.2	-0.4	-0.1	-6.4%	-4.3%	-1.6%	-0.3%
CR21	-	28.6	28.3	29.0	29.6	29.3	28.1	-0.3	0.4	-0.3	-1.5	-0.9%	1.4%	-1.2%	-5.2%
CR22	-	30.5	27.3	27.7	27.8	27.5	28.8	-3.1	-2.8	-0.2	1.0	-10.2%	-9.2%	-0.9%	3.6%
CR23	-	31.4	29.0	30.6	31.1	28.9	30.2	-2.4	-0.8	-2.3	-0.9	-7.6%	-2.5%	-7.3%	-2.9%
CR24	-	28.9	28.9	28.6	28.6	29.3	28.4	-0.1	-0.3	0.7	-0.2	-0.2%	-1.0%	2.5%	-0.5%
CR25	-	28.0	28.4	27.6	27.0	28.3	27.2	0.4	-0.4	1.3	0.2	1.5%	-1.3%	4.8%	0.6%
CR26	-	29.0	27.0	27.0	28.3	27.6	27.3	-2.0	-2.0	-0.7	-1.0	-7.0%	-6.9%	-2.6%	-3.4%
CR27	-	27.3	27.5	26.9	29.3	26.8	27.2	0.2	-0.4	-2.5	-2.2	0.7%	-1.5%	-8.5%	-7.4%
CR28	-	28.3	26.5	26.9	28.6	28.4	27.5	-1.9	-1.5	-0.2	-1.1	-6.5%	-5.2%	-0.8%	-4.0%
CR29	-	29.1	29.3	29.1	28.4	29.2	27.3	0.1	0.0	0.8	-1.2	0.5%	0.1%	2.7%	-4.1%
CR30	-	28.0	28.0	27.4	29.0	27.7	28.6	0.0	-0.5	-1.3	-0.3	-0.1%	-1.9%	-4.3%	-1.1%
CR31	-	28.6	26.2	26.8	27.9	26.2	26.9	-2.4	-1.8	-1.8	-1.0	-8.3%	-6.3%	-6.3%	-3.6%
CR32	-	27.2	26.9	28.2	26.5	27.1	26.8	-0.4	0.9	0.6	0.3	-1.4%	3.4%	2.5%	1.1%
CR33	-	30.5	28.6	30.8	32.5	29.4	29.2	-1.9	0.3	-3.1	-3.2	-6.2%	1.0%	-9.5%	-10.0%
CR34	-	27.8	27.9	28.4	27.6	27.5	27.8	0.1	0.6	-0.1	0.2	0.2%	2.0%	-0.5%	0.6%
CR35	-	27.6	26.4	27.8	28.5	27.3	28.3	-1.1	0.2	-1.2	-0.2	-4.2%	0.8%	-4.2%	-0.8%
CR36	-	27.3	27.8	27.7	28.1	28.0	28.4	0.5	0.4	0.0	0.3	1.8%	1.4%	-0.1%	1.1%
CR37	-	28.6	29.5	28.2	27.9	27.1	28.0	0.9	-0.5	-0.8	0.1	3.0%	-1.6%	-2.7%	0.3%
CR38	-	28.5	29.0	28.8	29.2	28.7	29.8	0.6	0.3	-0.5	0.7	1.9%	1.2%	-1.7%	2.3%
CR39	-	27.7	27.0	28.8	28.9	27.9	27.7	-0.7	1.1	-1.0	-1.2	-2.4%	4.1%	-3.3%	-4.2%
CR40	-	27.6	29.1	27.4	27.5	30.3	27.5	1.5	-0.1	2.9	0.0	5.4%	-0.5%	10.4%	0.1%

Table K-51 Maximum 24-hour PM_{2.5} concentration at community receptors, ranked by concentration

Rank	Ranking by concentration ($\mu\text{g}/\text{m}^3$)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	36.2	33.9	34.2	33.7	34.9	33.2
2		31.8	32.3	32.0	32.7	32.0	33.0
3		31.4	31.0	30.8	32.5	30.9	30.5
4		30.8	30.2	30.6	31.4	30.3	30.2
5		30.5	30.1	29.4	31.1	30.0	30.0
6		30.5	29.5	29.2	30.3	29.4	29.8
7		29.5	29.3	29.1	29.7	29.3	29.6
8		29.2	29.1	29.0	29.6	29.3	29.6
9		29.2	29.1	28.9	29.6	29.3	29.5
10		29.1	29.0	28.8	29.4	29.2	29.2

Table K-52 Maximum 24-hour PM_{2.5} concentration at community receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum ($\mu\text{g}/\text{m}^3$)				Ranking by decrease in concentration relative to Do Minimum ($\mu\text{g}/\text{m}^3$)			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
	1	2.16	1.51	2.86	2.08	-3.84	-2.80	-3.08
2	1.48	1.47	1.29	1.72	-3.11	-2.15	-2.49	-3.23
3	1.10	1.31	1.28	1.14	-2.40	-1.99	-2.26	-2.18
4	0.99	1.12	1.13	1.01	-2.36	-1.95	-2.21	-1.53
5	0.86	0.94	1.03	0.66	-2.03	-1.95	-1.75	-1.39
6	0.67	0.69	0.98	0.34	-1.88	-1.80	-1.56	-1.21
7	0.57	0.56	0.78	0.30	-1.85	-1.47	-1.45	-1.17
8	0.55	0.39	0.71	0.30	-1.79	-1.34	-1.26	-1.14
9	0.49	0.38	0.65	0.29	-1.62	-1.21	-1.20	-1.00
10	0.48	0.34	0.65	0.28	-1.53	-1.05	-1.06	-0.95

Table K-53 Maximum 24-hour PM_{2.5} concentration at community receptors, ranked by percentage increase and by decrease in concentration

Rank	Ranking by % increase in concentration relative to Do Minimum				Ranking by % decrease in concentration relative to Do Minimum			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
	1	6.8%	5.4%	10.4%	7.9%	-10.6%	-9.2%	-9.5%
2	5.4%	5.3%	4.8%	6.2%	-10.2%	-7.0%	-8.5%	-10.0%
3	4.1%	4.8%	4.3%	3.9%	-8.3%	-6.9%	-7.4%	-7.4%
4	3.4%	4.1%	3.9%	3.6%	-7.6%	-6.7%	-7.3%	-5.2%
5	3.0%	3.4%	3.7%	2.3%	-7.0%	-6.3%	-6.3%	-4.4%
6	2.3%	2.6%	3.3%	1.2%	-6.5%	-5.4%	-5.3%	-4.2%
7	2.1%	2.0%	2.7%	1.1%	-6.4%	-5.2%	-4.6%	-4.1%
8	1.9%	1.4%	2.5%	1.1%	-6.2%	-4.8%	-4.3%	-4.0%
9	1.8%	1.4%	2.5%	1.1%	-5.6%	-4.3%	-4.2%	-3.6%
10	1.8%	1.2%	2.3%	0.9%	-5.3%	-3.6%	-3.5%	-3.4%

Table K-54 Maximum 24-hour PM_{2.5} concentration at RWR receptors, ranked by concentration

Rank	Ranking by concentration ($\mu\text{g}/\text{m}^3$)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	50.2	48.4	47.1	50.7	48.5	48.5
2		49.9	47.8	46.4	47.1	48.3	46.7
3		49.9	46.0	46.2	46.0	45.3	46.4
4		48.8	45.3	46.1	45.9	45.2	45.5
5		48.0	45.3	45.7	45.5	45.0	45.5
6		47.8	44.8	45.7	44.8	44.8	44.8
7		47.1	44.5	45.3	44.7	44.7	44.2
8		46.7	44.4	44.8	44.4	44.7	43.4
9		46.7	44.3	44.6	44.1	44.0	43.3
10		46.1	44.3	44.4	44.1	43.9	43.2

Table K-55 Maximum 24-hour PM_{2.5} concentration at RWR receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum ($\mu\text{g}/\text{m}^3$)				Ranking by decrease in concentration relative to Do Minimum ($\mu\text{g}/\text{m}^3$)			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
	1	2	3	4	5	6	7	8
1	5.9	8.7	8.0	7.7	-8.2	-6.9	-7.6	-7.8
2	5.1	7.9	7.3	6.9		-7.2	-6.3	-7.4
3	5.1	7.4	5.4	6.0		-7.0	-6.2	-7.0
4	5.0	6.2	5.3	5.8		-6.3	-6.2	-6.7
5	4.8	6.1	5.0	5.7		-6.0	-6.1	-6.0
6	4.8	5.9	5.0	5.6		-5.8	-6.1	-5.9
7	4.7	5.7	5.0	5.5		-5.8	-6.0	-5.8
8	4.7	5.7	4.9	5.5		-5.8	-5.8	-5.7
9	4.6	5.5	4.8	5.3		-5.8	-5.8	-5.4
10	4.4	5.3	4.7	5.2		-5.7	-5.6	-5.4

Table K-56 Maximum 24-hour PM_{2.5} concentration at RWR receptors, ranked by percentage increase and by decrease in concentration

Rank	Ranking by % increase in concentration relative to Do Minimum				Ranking by % decrease in concentration relative to Do Minimum			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
	1	2	3	4	5	6	7	8
1	20.0%	28.0%	23.7%	26.7%	-18.9%	-18.6%	-20.2%	-21.4%
2	17.1%	27.1%	18.1%	23.7%		-17.2%	-18.0%	-19.9%
3	15.7%	24.8%	18.0%	21.2%		-16.5%	-17.9%	-19.8%
4	15.6%	20.2%	17.7%	20.7%		-16.4%	-16.8%	-19.0%
5	15.3%	20.0%	17.1%	20.3%		-16.4%	-16.5%	-17.8%
6	15.1%	19.8%	16.7%	18.6%		-16.2%	-16.1%	-16.6%
7	15.0%	18.9%	16.6%	18.5%		-16.1%	-16.0%	-16.6%
8	14.7%	18.8%	16.5%	18.5%		-16.0%	-15.8%	-16.3%
9	14.6%	18.3%	15.9%	17.9%		-16.0%	-15.7%	-15.7%
10	14.5%	17.6%	15.7%	17.6%		-15.9%	-15.5%	-15.3%

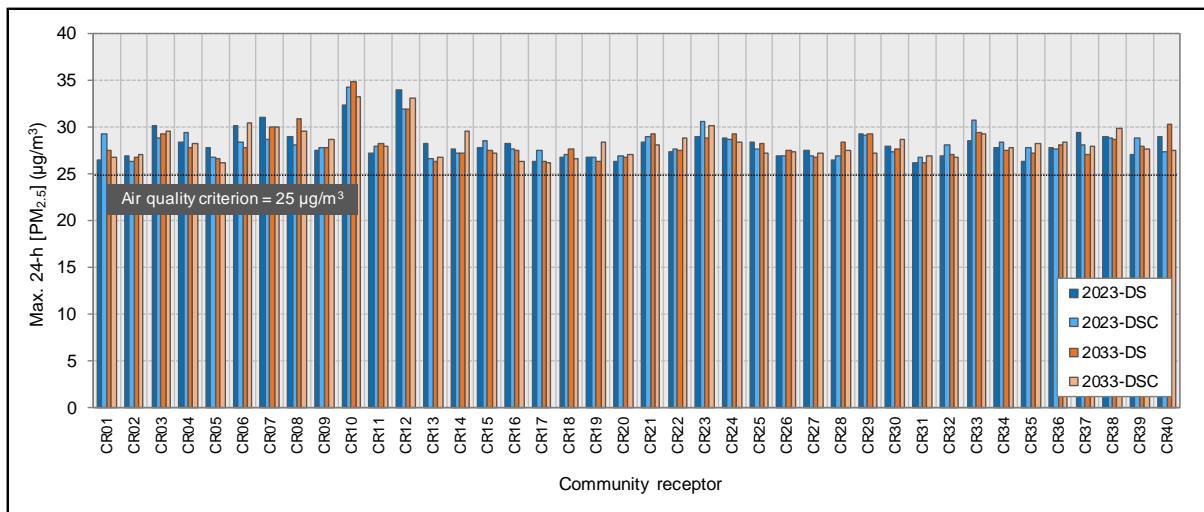


Figure K-104 Maximum 24-hour mean PM_{2.5} concentration at community receptors (with-project and cumulative scenarios)

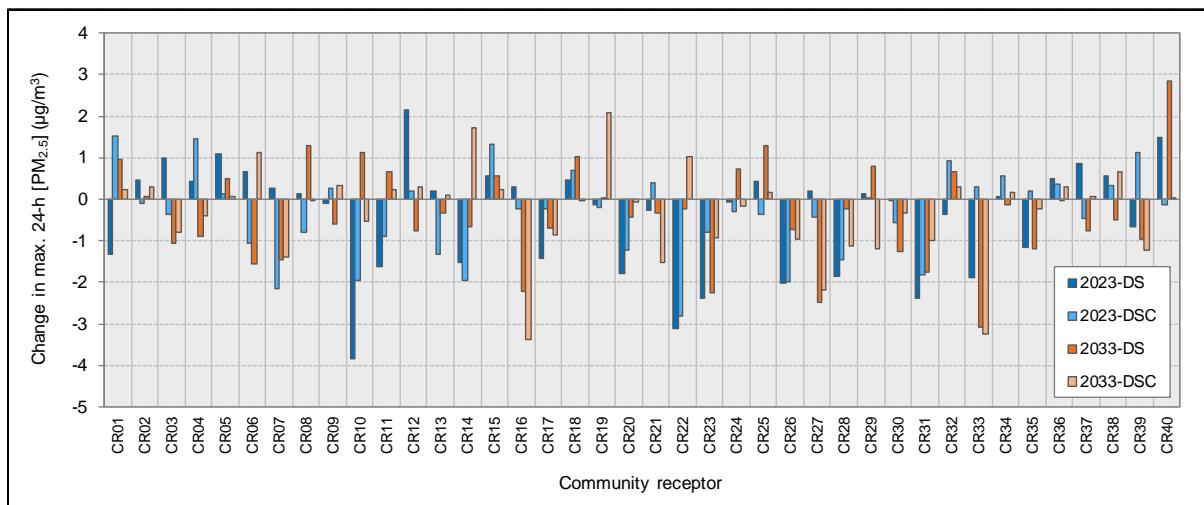


Figure K-105 Change in maximum 24-hour mean PM_{2.5} concentration at community receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)



Figure K-106 Source contributions to maximum 24-hour mean PM_{2.5} concentration at community receptors (with-project and cumulative scenarios)

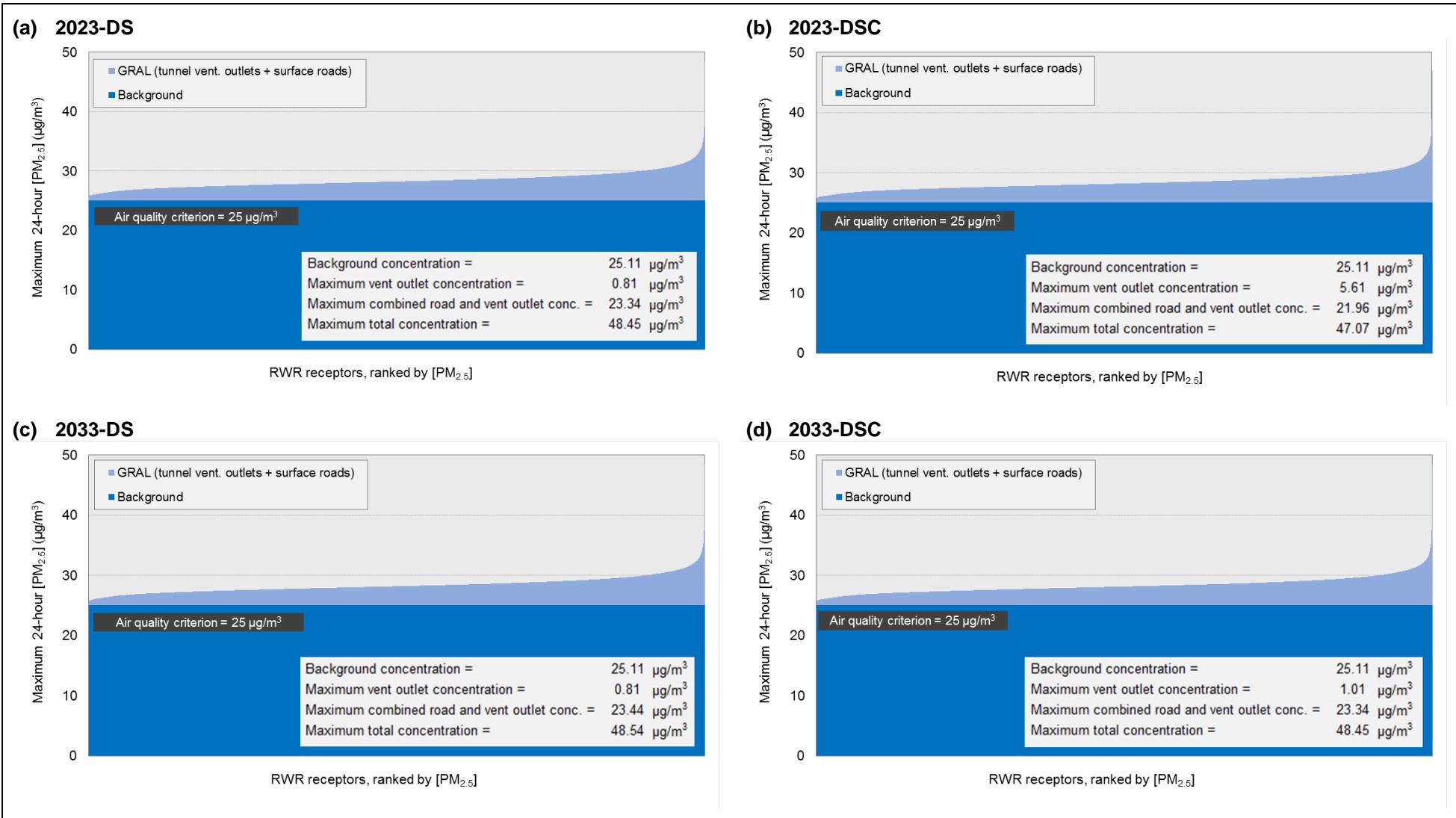


Figure K-107 Source contributions to maximum 24-hour mean PM_{2.5} concentration at RWR receptors (with-project and cumulative scenarios)

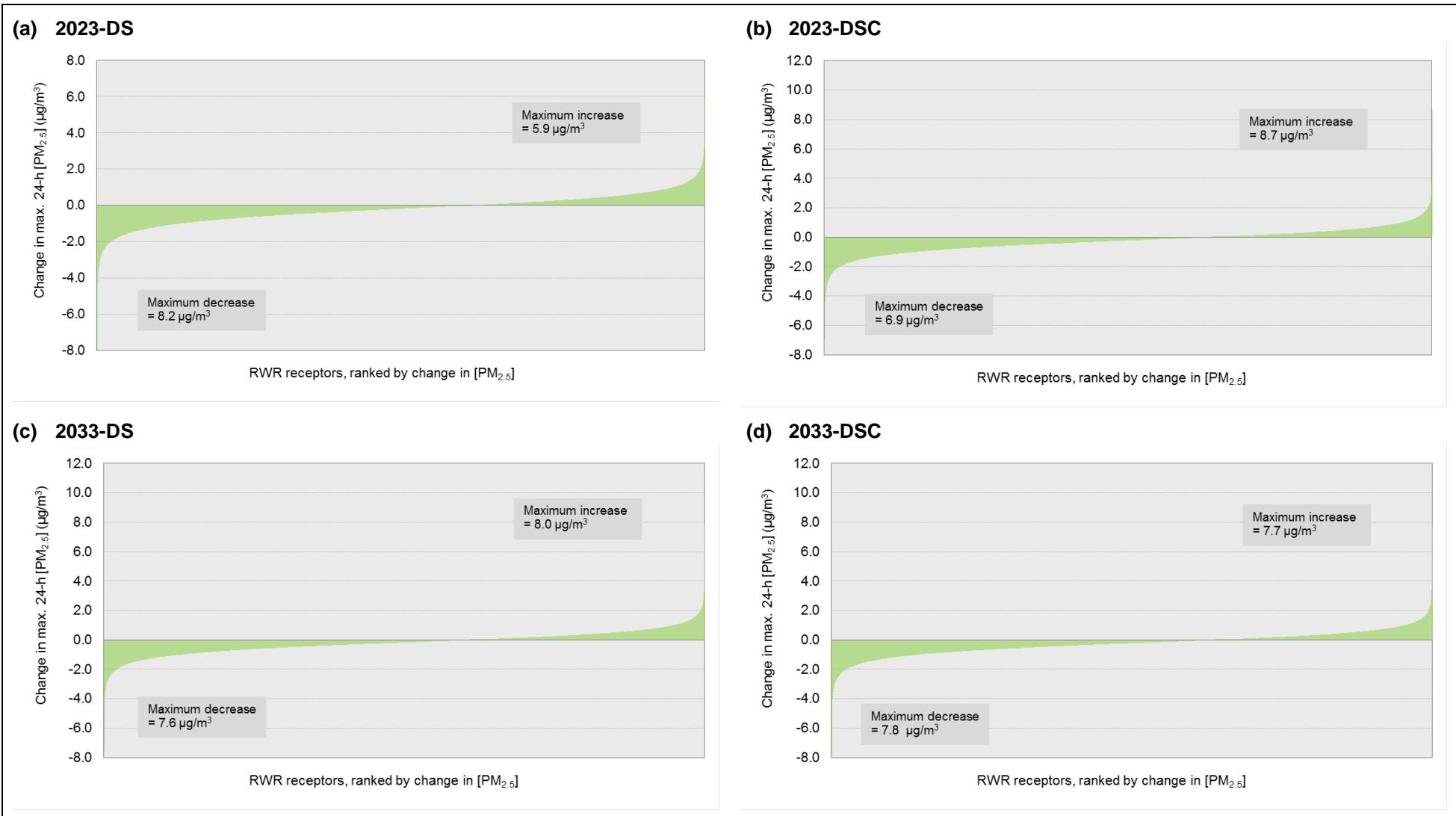


Figure K-108 Change in maximum 24-hour mean PM_{2.5} concentration at RWR receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)

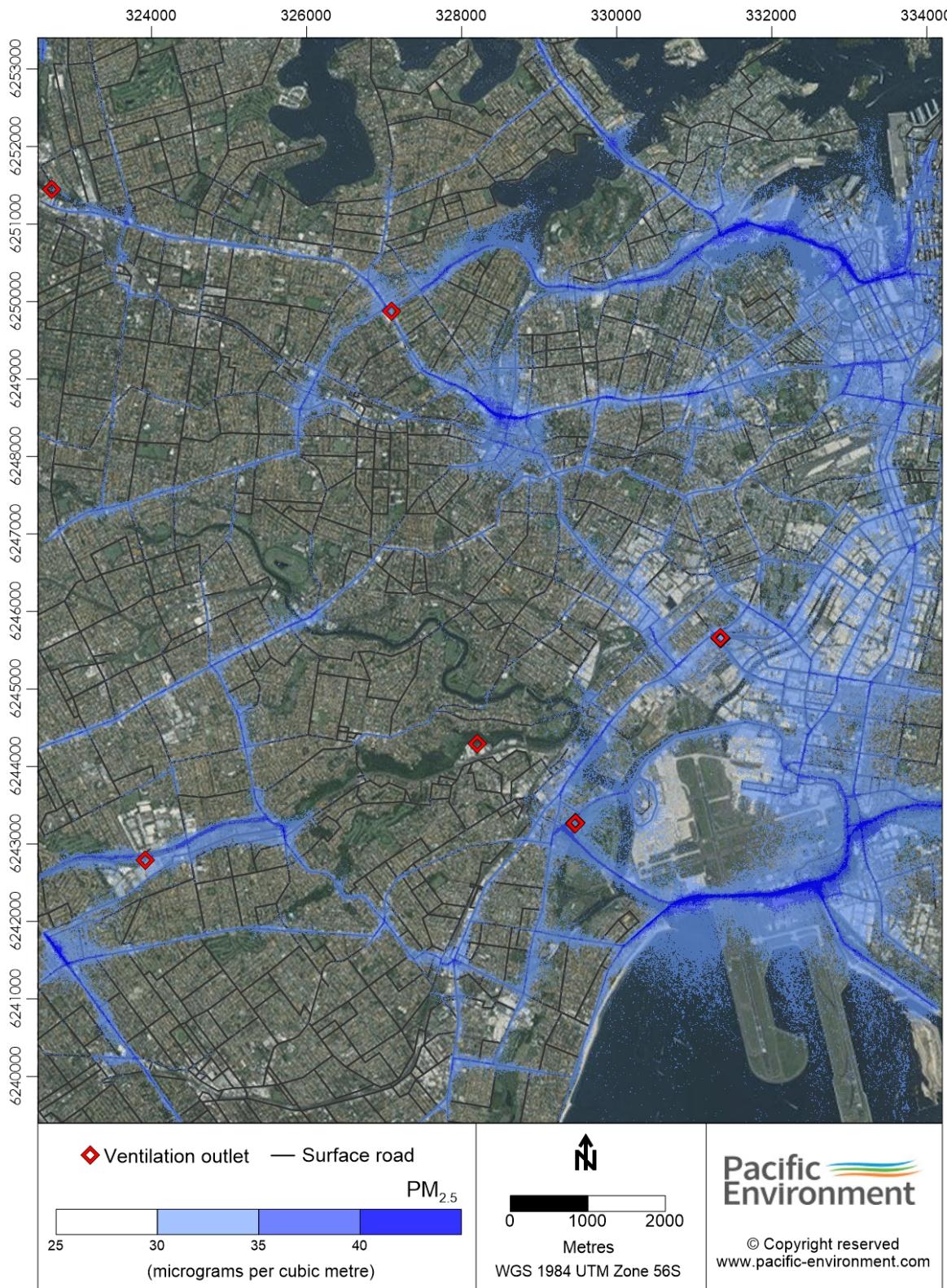


Figure K-109 Contour plot of maximum 24-hour mean $\text{PM}_{2.5}$ concentration in 2023 Do Minimum scenario (all sources, 2023-DM)

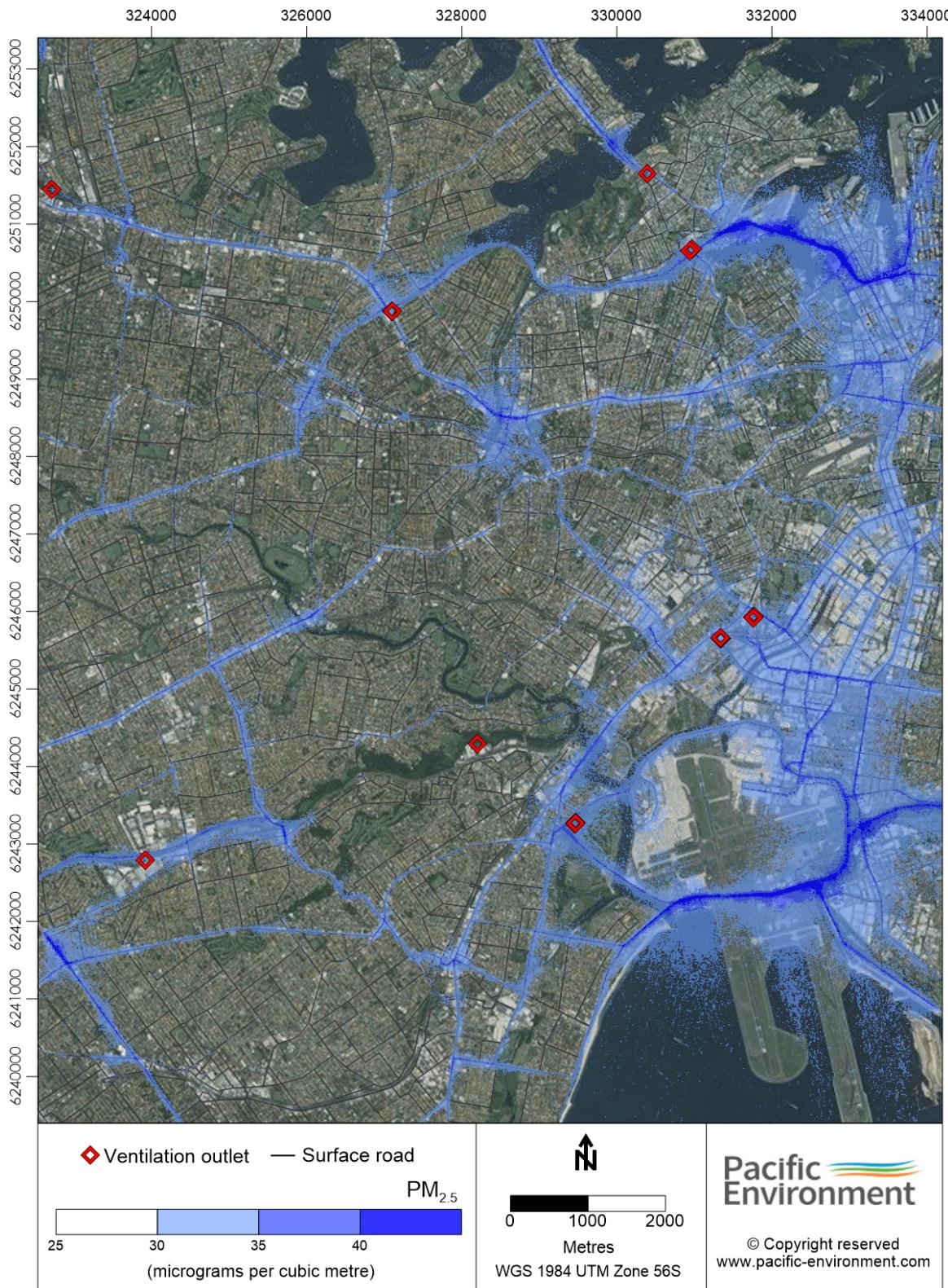


Figure K-110 Contour plot of maximum 24-hour mean $\text{PM}_{2.5}$ concentration in 2023 Do Something scenario (all sources, 2023-DS)

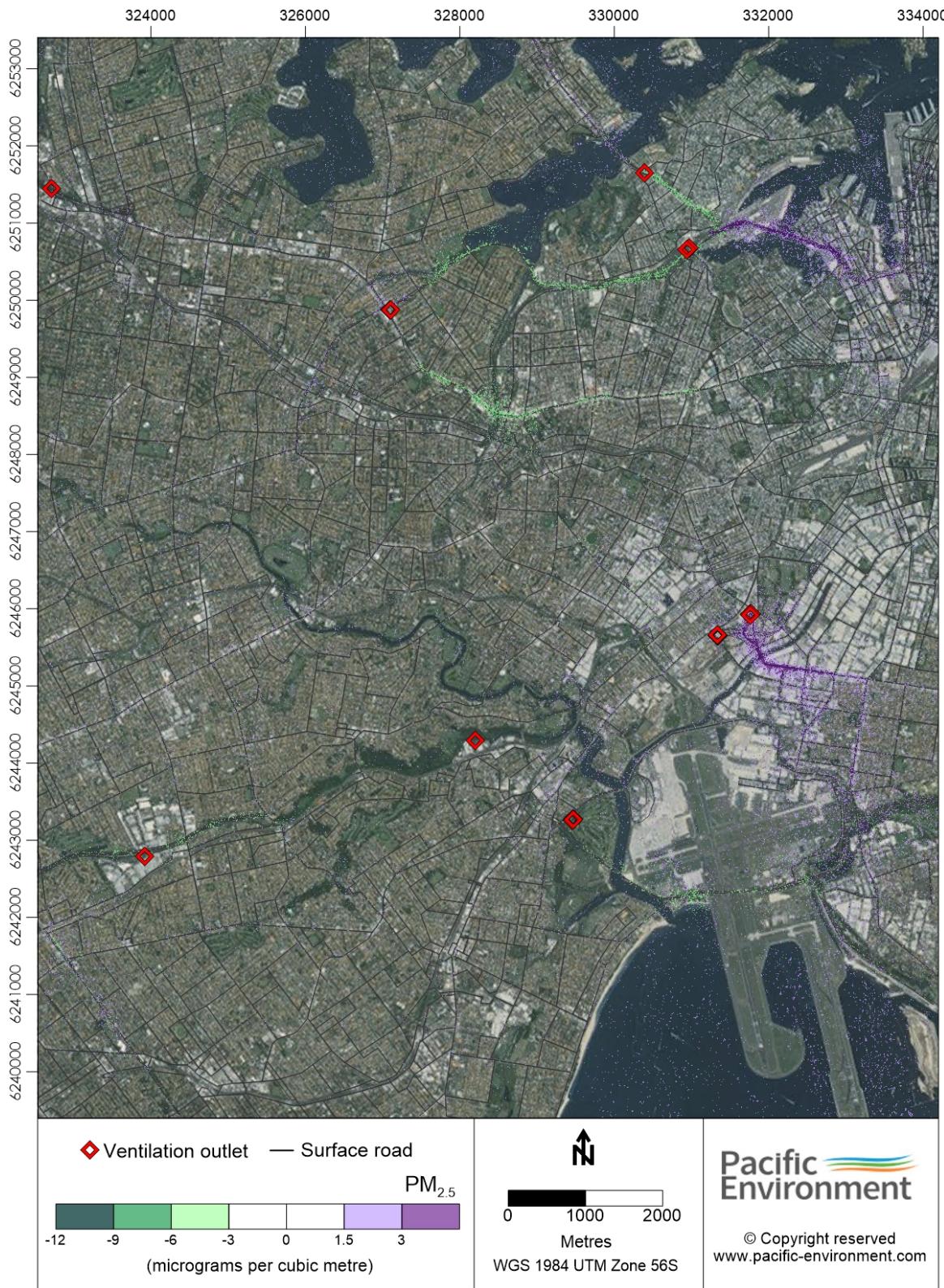


Figure K-111 Contour plot of change in maximum 24-hour mean PM_{2.5} concentration in 2023 Do Something scenario (all sources, 2023-DS minus 2023-DM)

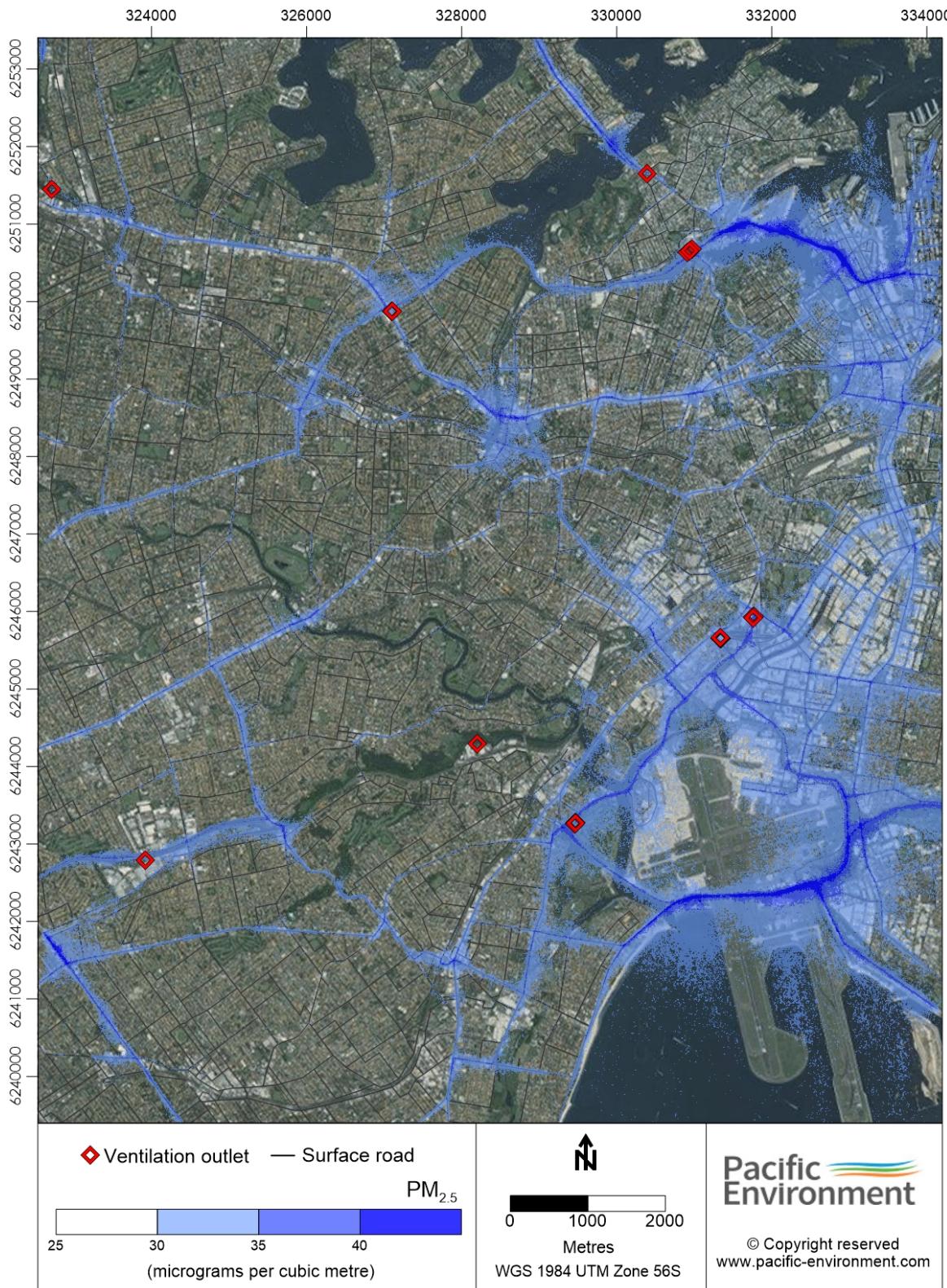


Figure K-112 Contour plot of maximum 24-hour mean $\text{PM}_{2.5}$ concentration in 2023 Cumulative scenario (all sources, 2023-DSC)

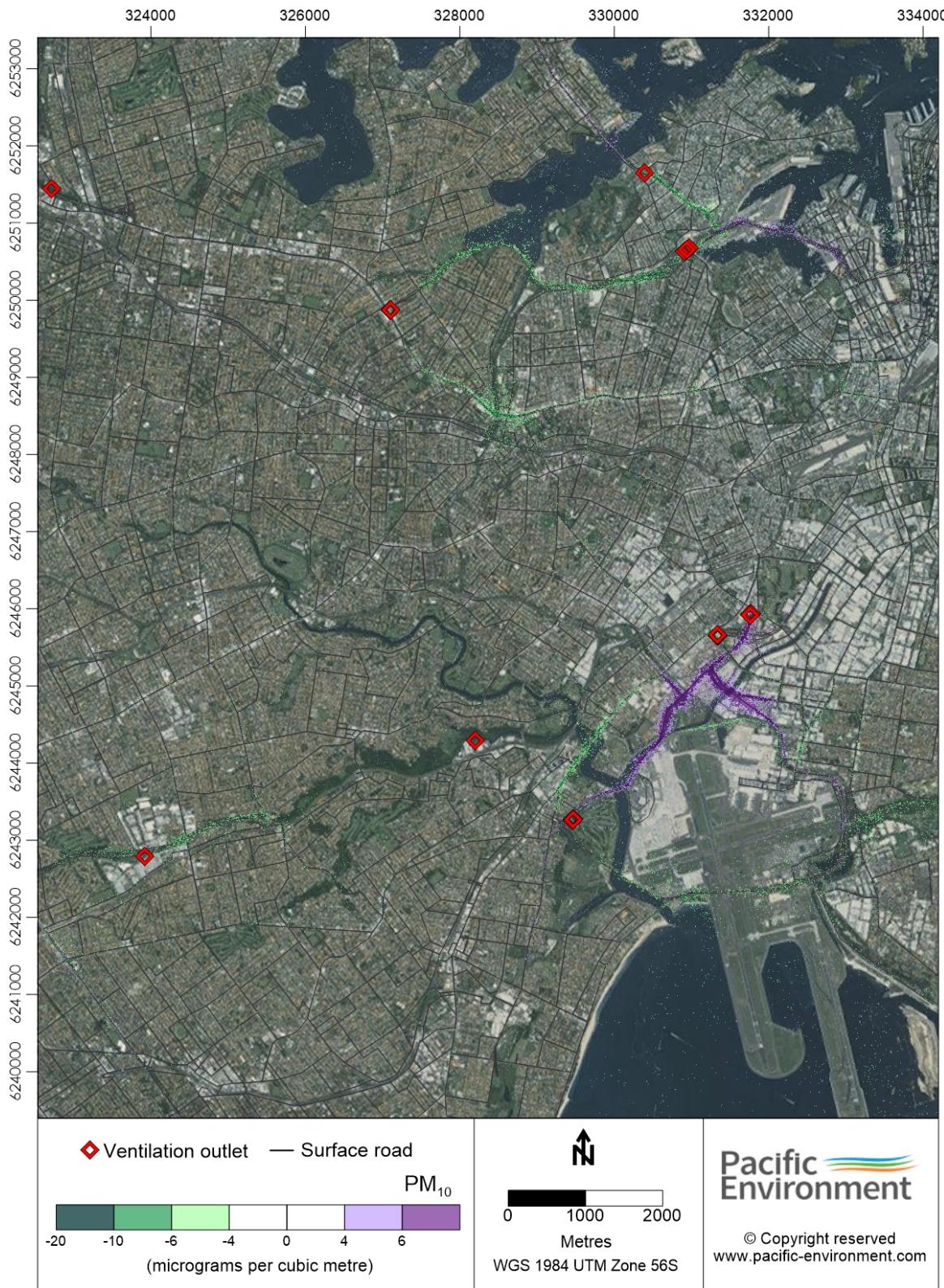


Figure K-113 Contour plot of change in maximum 24-hour mean PM_{2.5} concentration in 2023 Cumulative scenario (all sources, 2023-DSC minus 2023-DM)

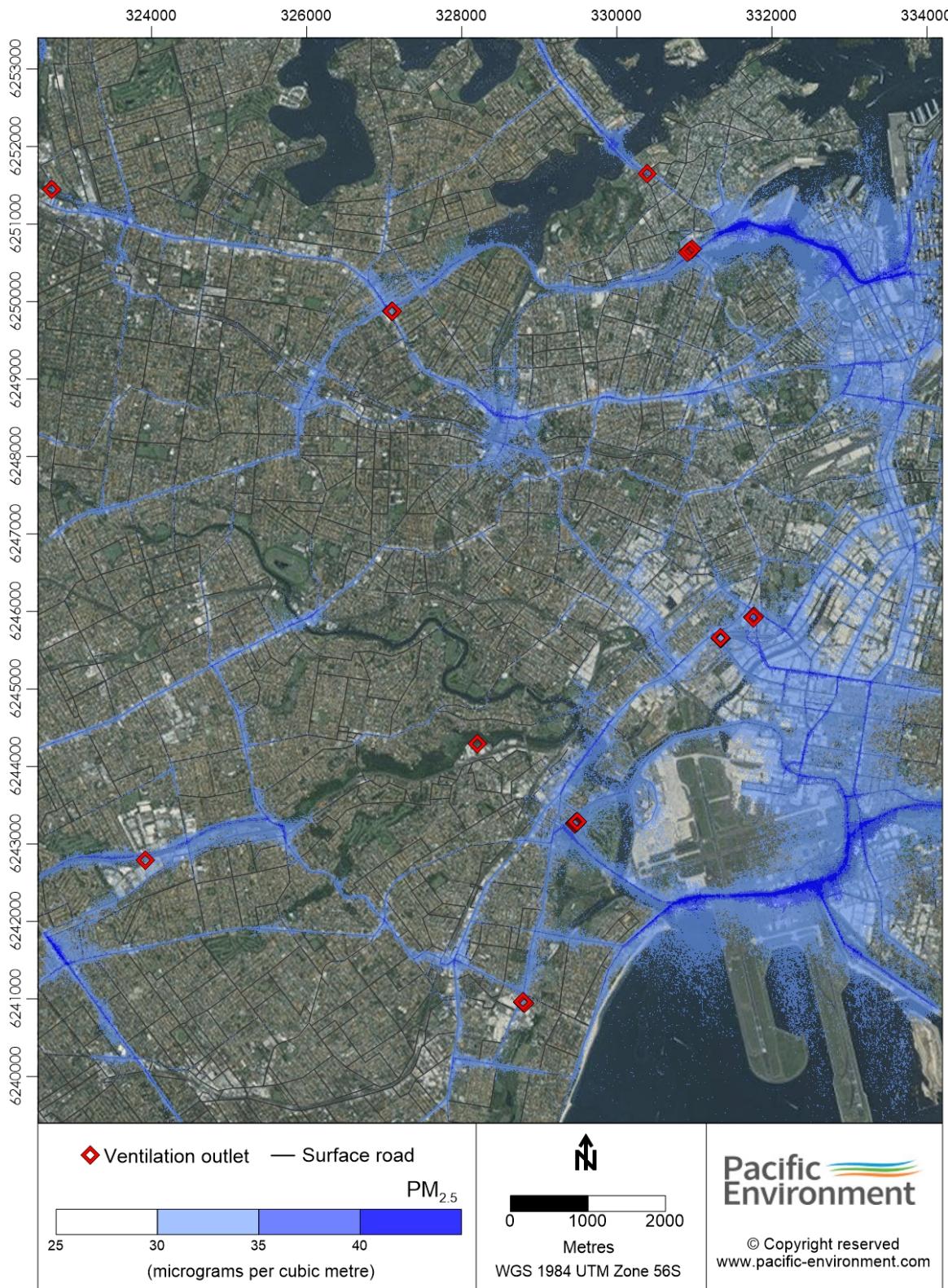


Figure K-114 Contour plot of maximum 24-hour mean $\text{PM}_{2.5}$ concentration in 2033 Do Minimum scenario (all sources, 2033-DM)

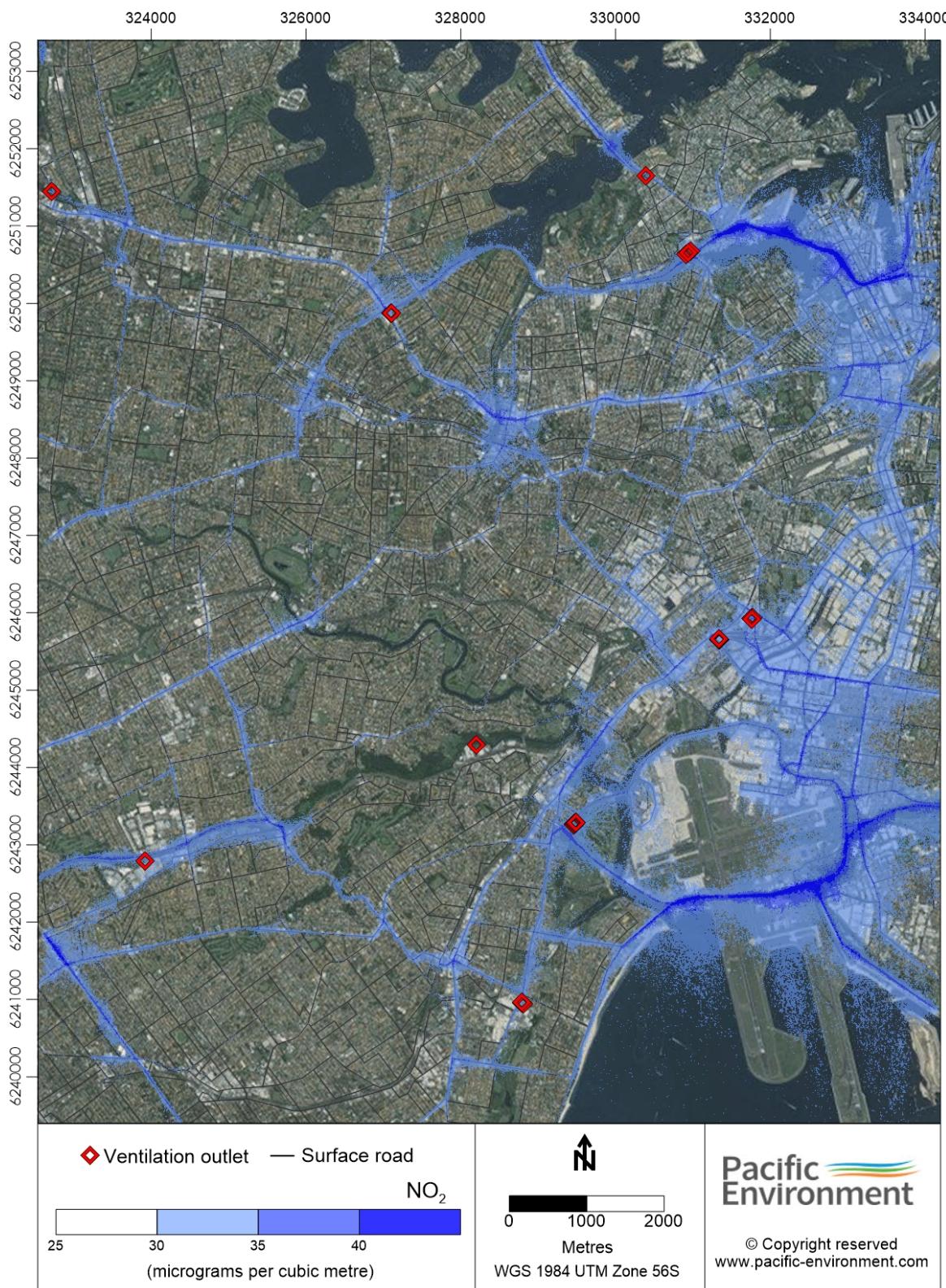


Figure K-115 Contour plot of maximum 24-hour mean $\text{PM}_{2.5}$ concentration in 2033 Do Something scenario (all sources, 2033-DS)