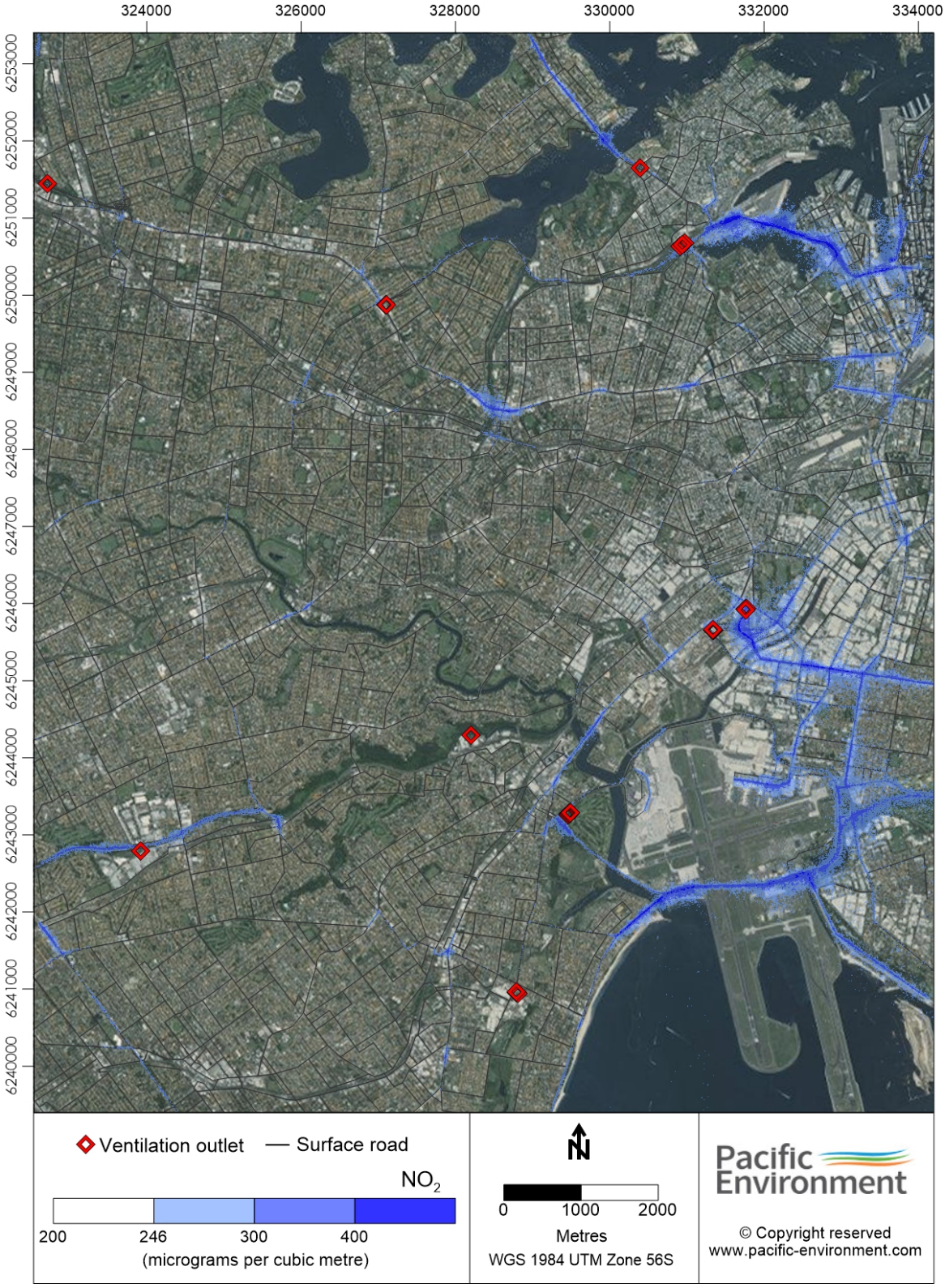

Figure K-39 Contour plot of maximum 1-hour mean NO_2 concentration in the 2033 Do Something scenario (all sources, 2033-DS)

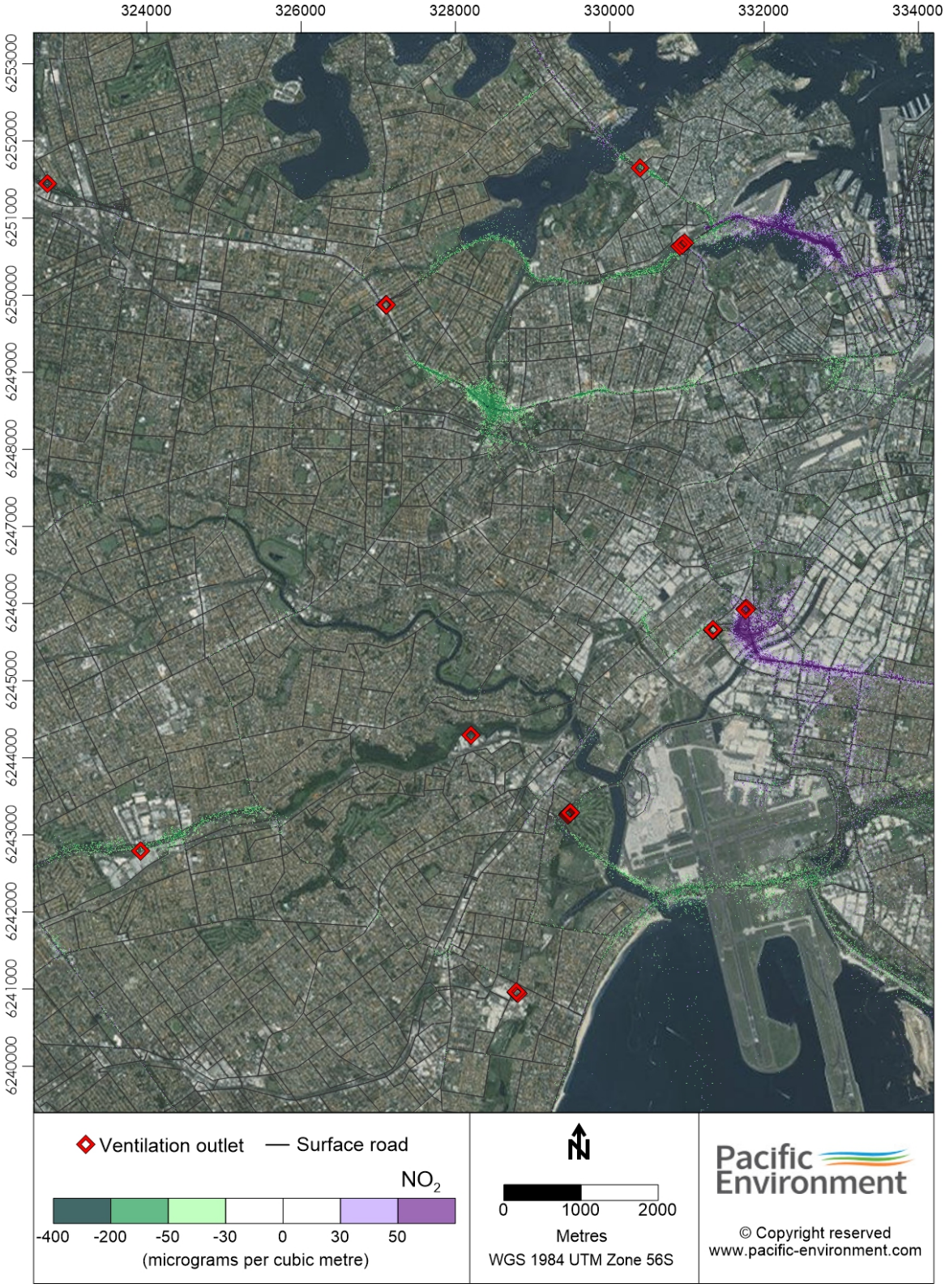

Figure K-40 Contour plot of change in maximum 1-hour mean NO_2 concentration in the 2033 Do Something scenario (all sources, 2033-DS minus 2033-DM)

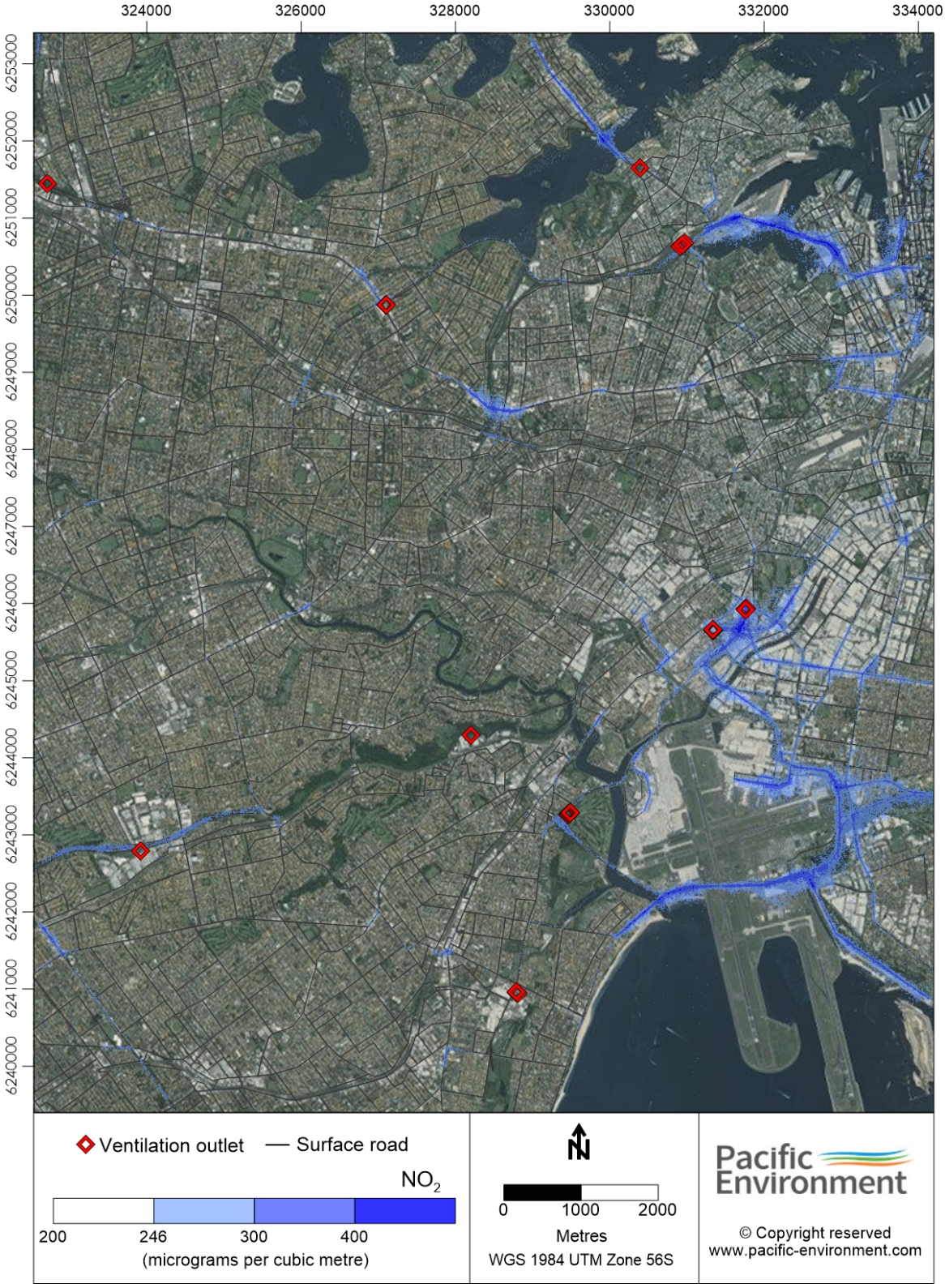

Figure K-41 Contour plot of maximum 1-hour mean NO_2 concentration in the 2033 cumulative scenario (all sources, 2033-DSC)

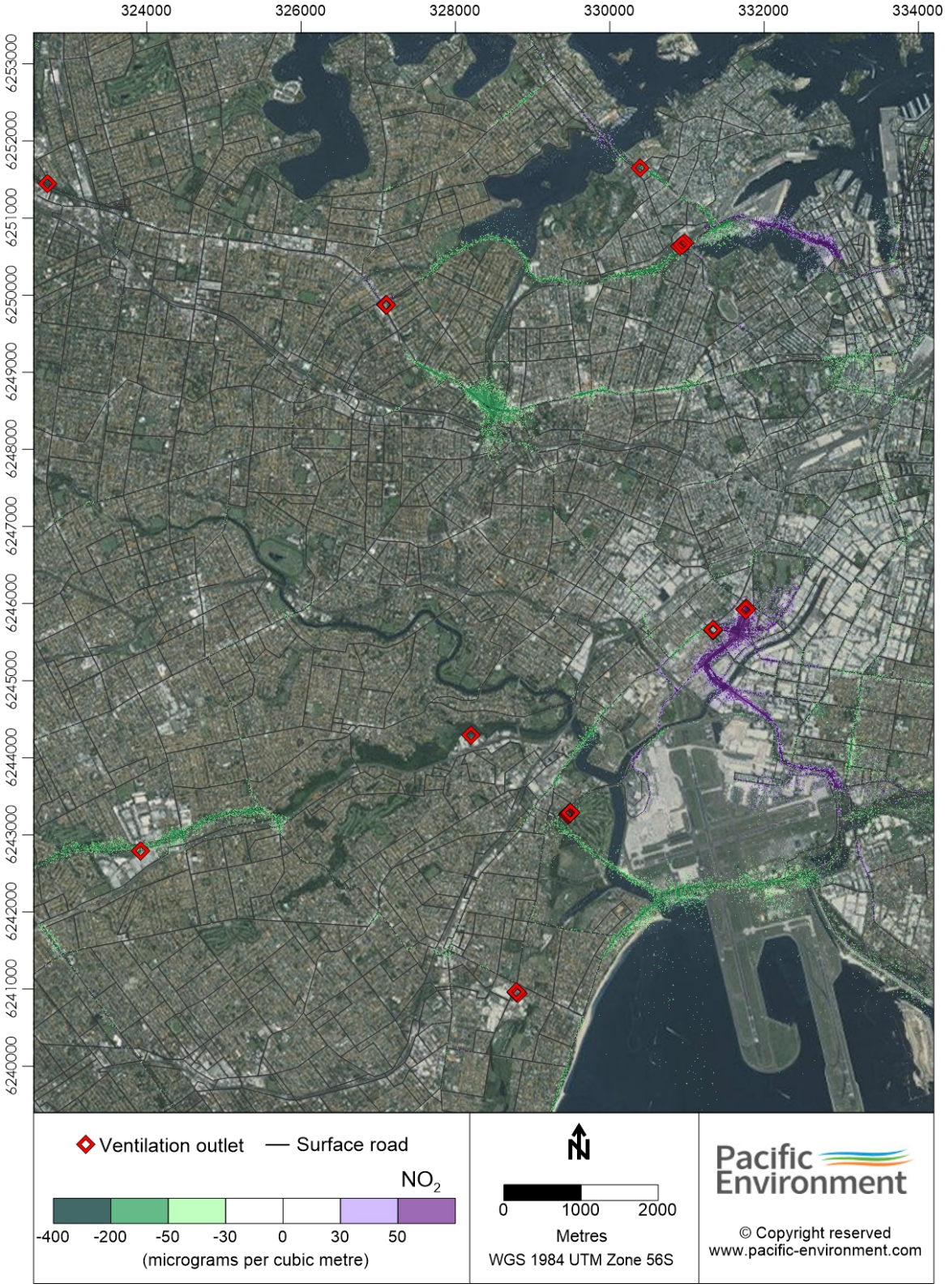

Figure K-42 Contour plot of change in maximum 1-hour mean NO_2 concentration in the 2033 cumulative scenario (all sources, 2033-DSC minus 2033-DM)

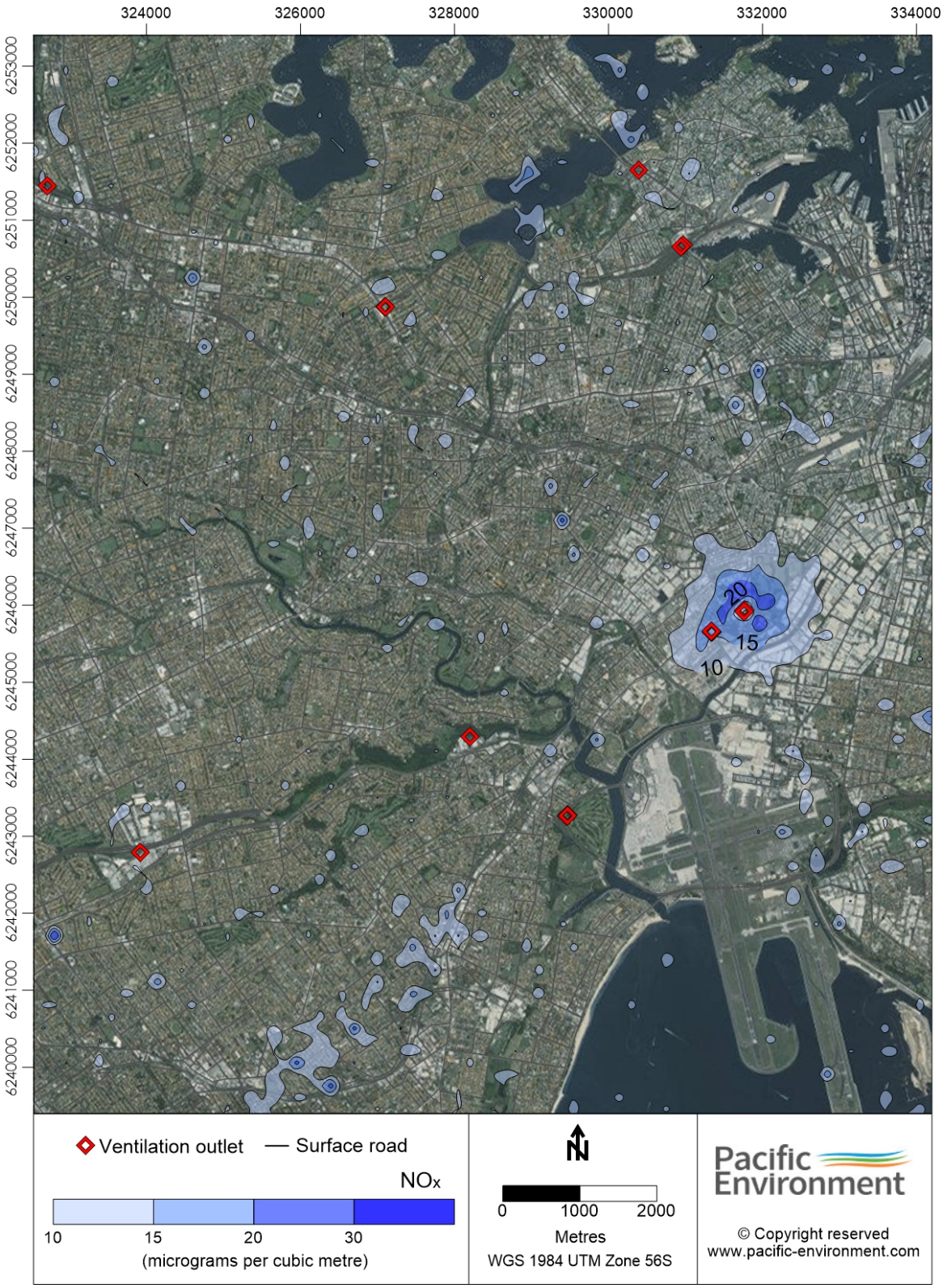

Figure K-43 Contour plot of maximum 1-hour NO_X concentrations (ventilation outlets only, 2023-DS)

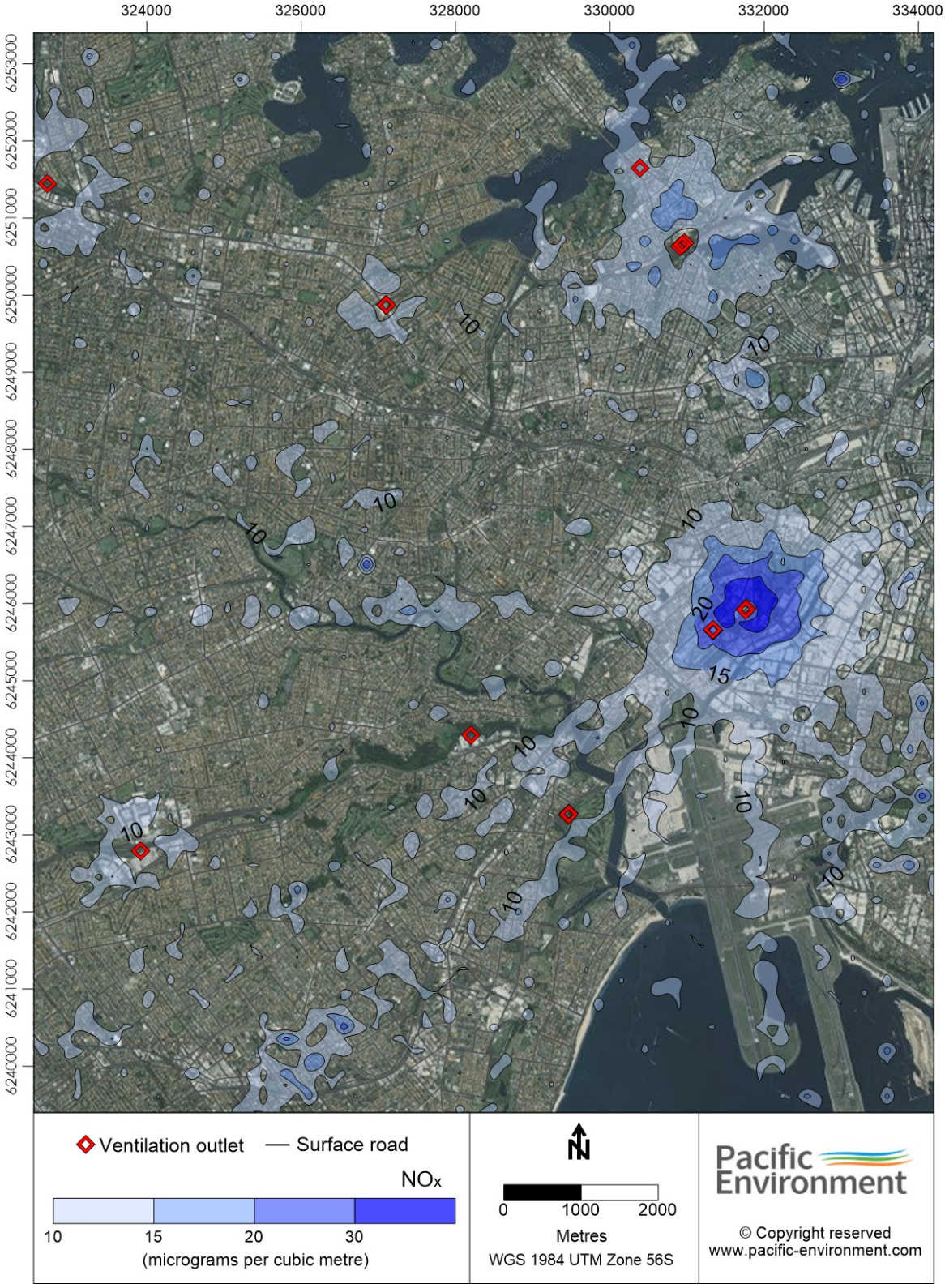

Figure K-44 Contour plot of maximum 1-hour NO_X concentrations (ventilation outlets only, 2023-DSC)

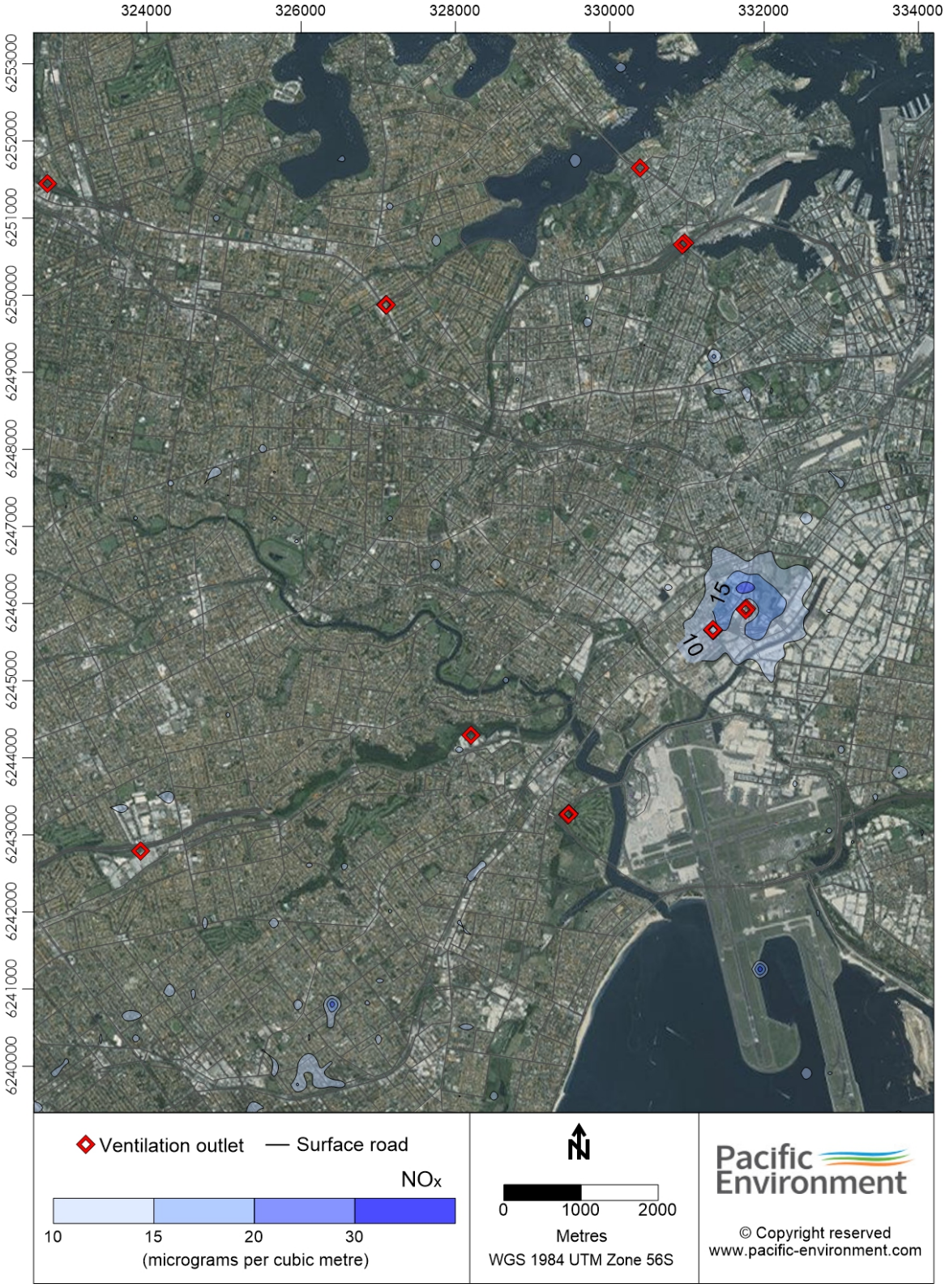

Figure K-45 Contour plot of maximum 1-hour NO_X concentrations (ventilation outlets only, 2033-DS)

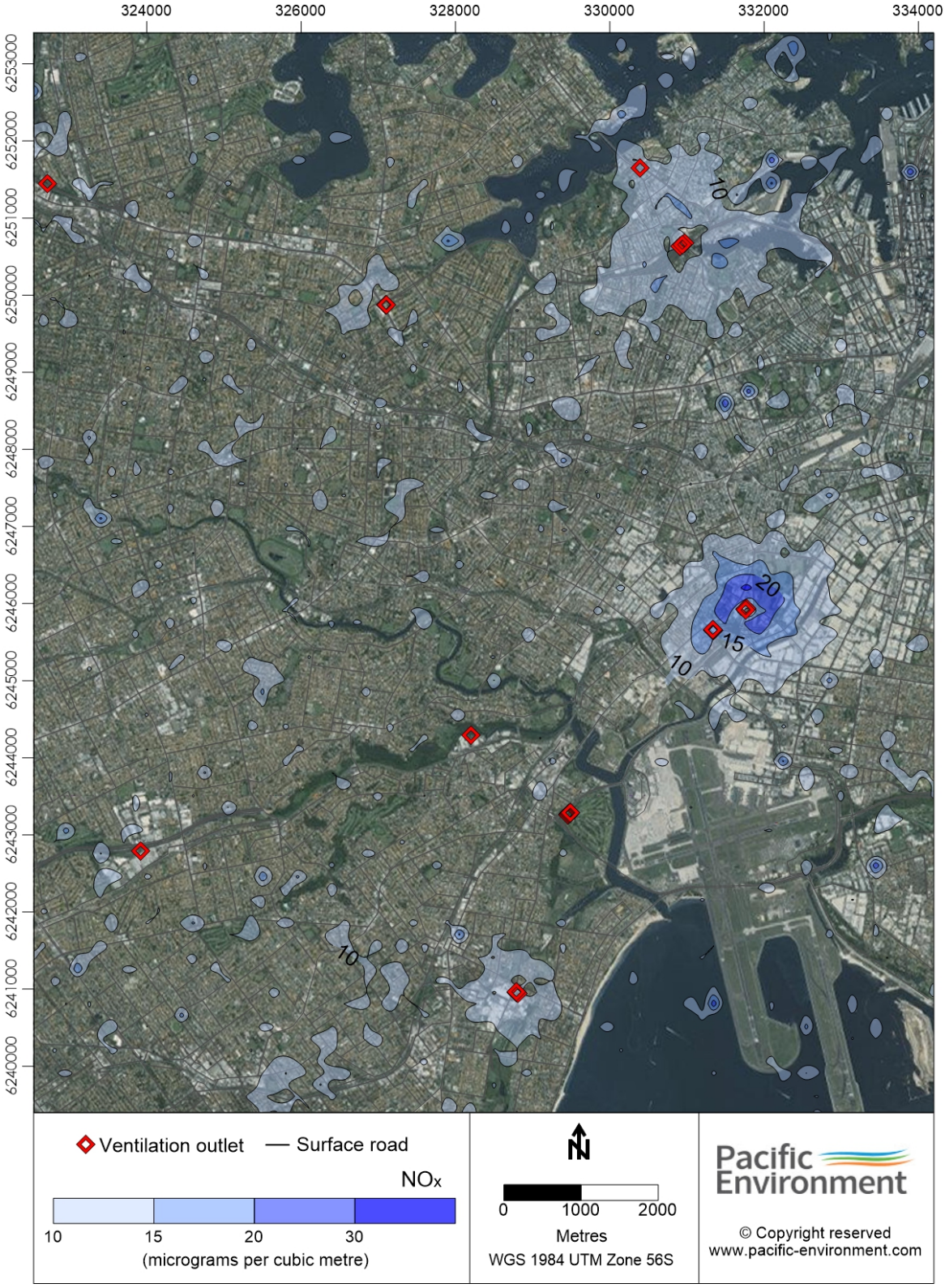

Figure K-46 Contour plot of maximum 1-hour NO_X concentrations (ventilation outlets only, 2033-DSC)

K.5 PM_{10} (annual mean)

Table K-29 Annual mean PM_{10} concentration at community receptors

Receptor	Annual mean PM_{10} 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	-	17.7	17.6	17.7	17.8	17.7	17.7	-0.1	0.0	0.0	-0.1	-0.8%	-0.3%	-0.2%	-0.4%
CR02	-	17.5	17.3	17.6	17.5	17.4	17.6	-0.1	0.1	-0.1	0.0	-0.8%	0.5%	-0.5%	0.2%
CR03	-	19.7	18.9	18.8	19.5	18.7	18.9	-0.8	-0.9	-0.8	-0.7	-4.1%	-4.6%	-4.1%	-3.5%
CR04	-	18.5	18.2	18.2	18.4	18.3	18.3	-0.2	-0.2	-0.2	-0.1	-1.3%	-1.3%	-1.0%	-0.6%
CR05	-	17.8	17.6	17.6	17.8	17.5	17.6	-0.2	-0.2	-0.3	-0.2	-0.9%	-1.0%	-1.5%	-1.1%
CR06	-	18.4	18.3	18.4	18.6	18.4	18.5	-0.1	0.0	-0.2	0.0	-0.5%	0.1%	-0.9%	-0.3%
CR07	-	19.1	18.7	19.0	19.2	19.0	18.7	-0.4	-0.1	-0.2	-0.4	-2.1%	-0.7%	-1.0%	-2.2%
CR08	-	18.6	18.4	18.4	18.9	18.5	18.6	-0.3	-0.2	-0.3	-0.3	-1.4%	-1.3%	-1.7%	-1.5%
CR09	-	18.0	17.9	17.8	18.3	17.9	17.9	0.0	-0.1	-0.3	-0.4	-0.2%	-0.6%	-1.9%	-2.0%
CR10	-	21.5	21.0	21.0	21.2	21.4	21.1	-0.5	-0.5	0.2	-0.1	-2.3%	-2.3%	1.1%	-0.2%
CR11	-	18.1	17.9	18.0	18.1	17.9	18.0	-0.2	-0.1	-0.2	-0.2	-1.1%	-0.5%	-1.1%	-1.0%
CR12	-	18.0	17.7	17.8	17.6	17.6	17.9	-0.3	-0.1	0.0	0.3	-1.7%	-0.8%	0.0%	1.5%
CR13	-	16.7	16.6	16.6	16.8	16.7	16.7	0.0	0.0	0.0	-0.1	-0.3%	-0.1%	-0.2%	-0.6%
CR14	-	17.5	17.2	17.4	17.4	17.2	17.3	-0.4	-0.1	-0.2	-0.1	-2.0%	-0.6%	-1.3%	-0.8%
CR15	-	17.8	17.8	17.9	17.7	17.9	17.8	0.0	0.1	0.1	0.0	-0.2%	0.6%	0.8%	0.1%
CR16	-	17.8	17.4	17.3	17.5	17.5	17.6	-0.4	-0.4	0.0	0.1	-2.3%	-2.5%	-0.2%	0.3%
CR17	-	17.5	17.5	17.5	17.6	17.5	17.6	0.0	0.0	-0.1	0.0	0.0%	0.0%	-0.6%	-0.2%
CR18	-	17.7	17.5	17.5	17.7	17.5	17.6	-0.1	-0.1	-0.2	-0.1	-0.8%	-0.8%	-1.1%	-0.8%
CR19	-	17.4	17.4	17.4	17.3	17.3	17.3	0.0	0.0	0.0	0.0	0.1%	0.1%	-0.1%	0.2%
CR20	-	17.7	17.6	17.5	17.8	17.6	17.8	-0.1	-0.2	-0.2	0.0	-0.8%	-1.1%	-1.2%	0.0%
CR21	-	18.0	17.9	17.9	17.9	17.8	18.0	-0.1	0.0	0.0	0.1	-0.4%	-0.2%	-0.3%	0.8%
CR22	-	18.8	17.9	18.1	19.1	18.0	18.1	-0.9	-0.7	-1.1	-1.0	-4.8%	-3.9%	-5.5%	-5.4%
CR23	-	19.1	18.2	18.1	18.8	18.3	18.2	-0.9	-1.0	-0.5	-0.6	-4.6%	-5.4%	-2.5%	-3.3%
CR24	-	19.0	19.0	18.9	18.8	18.9	19.0	0.0	-0.1	0.2	0.3	0.1%	-0.4%	0.8%	1.5%
CR25	-	18.1	18.1	18.2	18.2	18.0	18.1	0.0	0.1	-0.1	-0.1	0.2%	0.8%	-0.7%	-0.3%
CR26	-	17.9	17.7	17.7	17.8	17.7	17.8	-0.3	-0.2	-0.2	0.0	-1.4%	-1.3%	-0.9%	0.1%
CR27	-	17.9	18.0	18.0	17.9	18.1	18.1	0.1	0.1	0.2	0.2	0.8%	0.8%	1.2%	1.2%
CR28	-	17.0	16.9	16.8	16.9	16.8	16.9	-0.1	-0.2	-0.1	-0.1	-0.5%	-1.0%	-0.5%	-0.4%
CR29	-	17.4	17.0	17.3	17.1	16.9	17.2	-0.4	-0.1	-0.2	0.2	-2.3%	-0.5%	-1.0%	0.9%
CR30	-	18.4	18.4	18.6	18.4	18.5	18.4	0.0	0.1	0.1	0.0	-0.2%	0.6%	0.6%	-0.1%
CR31	-	18.7	18.0	17.9	18.6	18.0	17.9	-0.7	-0.7	-0.7	-0.7	-3.8%	-4.0%	-3.6%	-4.0%
CR32	-	17.6	17.5	17.6	17.7	17.5	17.7	-0.1	0.0	-0.2	0.0	-0.7%	0.2%	-1.0%	-0.1%
CR33	-	18.6	18.6	18.6	18.6	18.7	18.6	0.0	0.0	0.1	0.0	-0.1%	0.0%	0.7%	-0.2%
CR34	-	18.4	18.1	18.3	18.4	18.3	18.3	-0.3	-0.1	-0.1	-0.1	-1.4%	-0.6%	-0.3%	-0.4%
CR35	-	16.6	16.7	16.7	16.8	16.7	16.8	0.1	0.2	0.0	0.0	0.8%	1.0%	-0.3%	0.0%
CR36	-	16.6	16.7	16.7	16.6	16.6	16.6	0.1	0.1	0.0	0.0	0.4%	0.4%	-0.1%	-0.1%
CR37	-	18.1	18.3	18.4	18.3	18.3	18.3	0.1	0.3	0.0	0.0	0.7%	1.4%	-0.1%	0.2%
CR38	-	18.9	19.3	19.1	18.8	19.7	19.1	0.4	0.2	0.8	0.3	2.1%	1.0%	4.5%	1.6%
CR39	-	18.7	18.9	18.8	18.5	18.9	18.9	0.2	0.1	0.4	0.3	1.0%	0.5%	2.2%	1.8%
CR40	-	18.7	18.7	18.5	18.7	18.7	18.6	0.0	-0.2	-0.1	-0.1	0.2%	-1.2%	-0.4%	-0.7%

Table K-30 Annual mean PM_{10} concentration at community receptors, ranked by concentration

Rank	Ranking by concentration (µg/m³)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	21.5	21.0	21.0	21.2	21.4	21.1
2	-	19.7	19.3	19.1	19.5	19.7	19.1
3	-	19.1	19.0	19.0	19.2	19.0	19.0
4	-	19.1	18.9	18.9	19.1	18.9	18.9
5	-	19.0	18.9	18.8	18.9	18.9	18.9
6	-	18.9	18.7	18.8	18.8	18.7	18.7
7	-	18.8	18.7	18.6	18.8	18.7	18.6
8	-	18.7	18.6	18.6	18.8	18.7	18.6
9	-	18.7	18.4	18.5	18.7	18.5	18.6
10	-	18.7	18.4	18.4	18.6	18.5	18.5

Table K-31 Annual mean PM_{10} concentration at community receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum (µg/m³)				Ranking by decrease in concentration relative to Do Minimum (µg/m³)			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
1	0.40	0.25	0.84	0.34	-0.90	-1.04	-1.05	-1.03
2	0.19	0.18	0.40	0.30	-0.88	-0.91	-0.80	-0.75
3	0.14	0.17	0.23	0.28	-0.81	-0.74	-0.67	-0.68
4	0.14	0.14	0.22	0.26	-0.71	-0.74	-0.47	-0.61
5	0.12	0.14	0.16	0.21	-0.49	-0.49	-0.34	-0.42
6	0.07	0.11	0.14	0.16	-0.42	-0.44	-0.31	-0.37
7	0.04	0.10	0.13	0.14	-0.41	-0.25	-0.27	-0.29
8	0.03	0.10	0.10	0.05	-0.39	-0.25	-0.23	-0.19
9	0.02	0.09	0.01	0.04	-0.36	-0.23	-0.21	-0.18
10	0.01	0.06	-0.01	0.04	-0.31	-0.23	-0.20	-0.14

Table K-32 Annual mean PM_{10} 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	2.1%	1.4%	4.5%	1.8%	-4.8%	-5.4%	-5.5%	-5.4%
2	1.0%	1.0%	2.2%	1.6%	-4.6%	-4.6%	-4.1%	-4.0%
3	0.8%	1.0%	1.2%	1.5%	-4.1%	-4.0%	-3.6%	-3.5%
4	0.8%	0.8%	1.1%	1.5%	-3.8%	-3.9%	-2.5%	-3.3%
5	0.7%	0.8%	0.8%	1.2%	-2.3%	-2.5%	-1.9%	-2.2%
6	0.4%	0.6%	0.8%	0.9%	-2.3%	-2.3%	-1.7%	-2.0%
7	0.2%	0.6%	0.7%	0.8%	-2.3%	-1.3%	-1.5%	-1.5%
8	0.2%	0.5%	0.6%	0.3%	-2.1%	-1.3%	-1.3%	-1.1%
9	0.1%	0.5%	0.0%	0.2%	-2.0%	-1.3%	-1.2%	-1.0%
10	0.1%	0.4%	-0.1%	0.2%	-1.7%	-1.2%	-1.1%	-0.8%

Table K-33 Annual mean PM_{10} concentration at RWR receptors, ranked by concentration

Rank	Ranking by concentration (µg/m³)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	25.1	26.5	25.9	25.3	26.1	25.8
2	-	24.1	26.0	25.3	24.6	25.9	25.3
3	-	24.1	25.6	25.3	24.2	25.8	25.0
4	-	24.1	25.2	25.0	24.1	25.5	24.8
5	-	24.1	25.2	24.5	24.1	25.1	24.5
6	-	24.0	25.1	24.5	23.9	25.0	24.4
7	-	23.8	24.6	24.1	23.7	24.8	24.0
8	-	23.8	24.5	24.1	23.6	24.5	23.9
9	-	23.8	24.5	23.9	23.6	24.3	23.8
10	-	23.8	24.0	23.8	23.5	24.2	23.6

Table K-34 Annual mean PM_{10} concentration at RWR receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum (µg/m³)				Ranking by decrease in concentration relative to Do Minimum (µg/m³)			
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
1	1.9	3.4	1.9	3.7	-3.0	-3.0	-3.3	-3.2
2	1.7	2.3	1.7	2.5	-2.7	-2.5	-2.5	-2.4
3	1.6	2.2	1.7	2.4	-2.5	-2.5	-2.5	-2.4
4	1.4	2.1	1.6	2.3	-2.5	-2.5	-2.5	-2.3
5	1.4	2.1	1.6	2.3	-2.5	-2.4	-2.2	-2.3
6	1.4	2.0	1.4	2.3	-2.3	-2.4	-2.2	-2.1
7	1.4	2.0	1.4	2.3	-2.3	-2.3	-2.1	-2.1
8	1.4	1.9	1.3	2.1	-2.3	-2.2	-2.1	-1.9
9	1.4	1.9	1.2	2.1	-2.1	-2.1	-2.1	-1.9
10	1.4	1.8	1.2	2.1	-2.0	-1.9	-2.1	-1.9

Table K-35 Annual mean PM_{10} 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	8.9%	18.8%	10.2%	20.8%	-13.2%	-13.1%	-14.4%	-13.8%
2	7.7%	12.9%	9.1%	13.7%	-12.4%	-11.4%	-11.6%	-11.1%
3	7.5%	12.3%	8.4%	13.3%	-11.8%	-11.3%	-11.5%	-10.9%
4	7.0%	11.5%	7.2%	12.7%	-11.4%	-11.1%	-11.3%	-10.7%
5	6.6%	11.5%	7.0%	12.7%	-11.0%	-11.1%	-10.6%	-10.2%
6	6.3%	11.3%	6.3%	12.6%	-10.6%	-11.1%	-10.0%	-9.7%
7	6.2%	11.2%	6.3%	12.2%	-10.6%	-10.9%	-10.0%	-9.4%
8	6.0%	10.8%	6.2%	11.5%	-10.6%	-10.2%	-9.9%	-9.2%
9	6.0%	10.5%	6.2%	11.4%	-9.8%	-9.8%	-9.7%	-8.8%
10	5.9%	9.4%	6.2%	11.3%	-9.6%	-9.0%	-9.5%	-8.7%

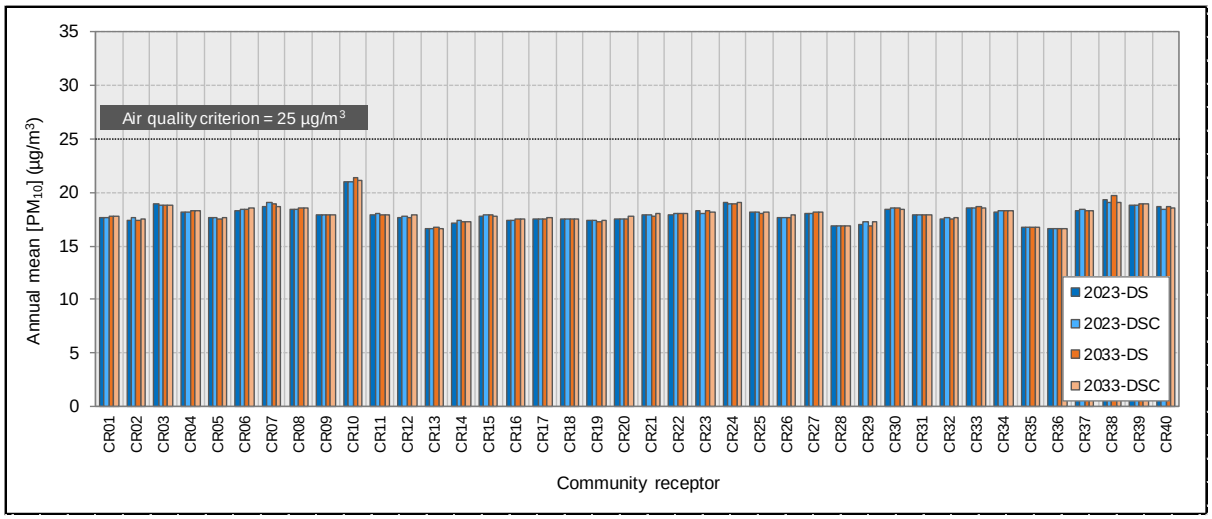

Figure K-47 **Annual mean PM_{10} concentration at community receptors (with-project and cumulative scenarios)**

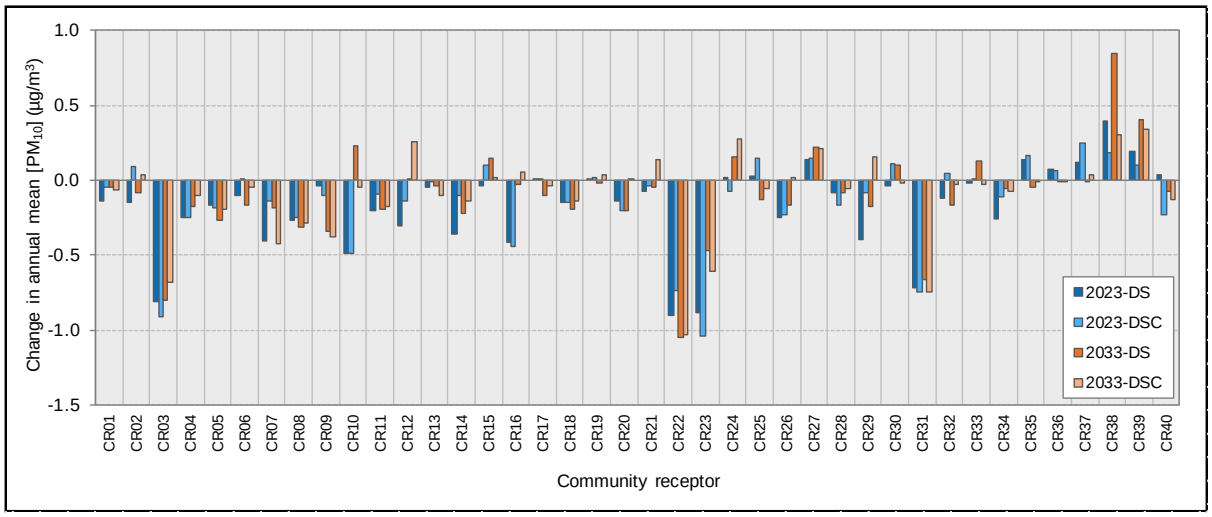

Figure K-48 **Change in annual mean PM_{10} concentration at community receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)**

Figure K-49 **Source contributions to annual mean PM_{10} concentration at community receptors (with-project and cumulative scenarios)**

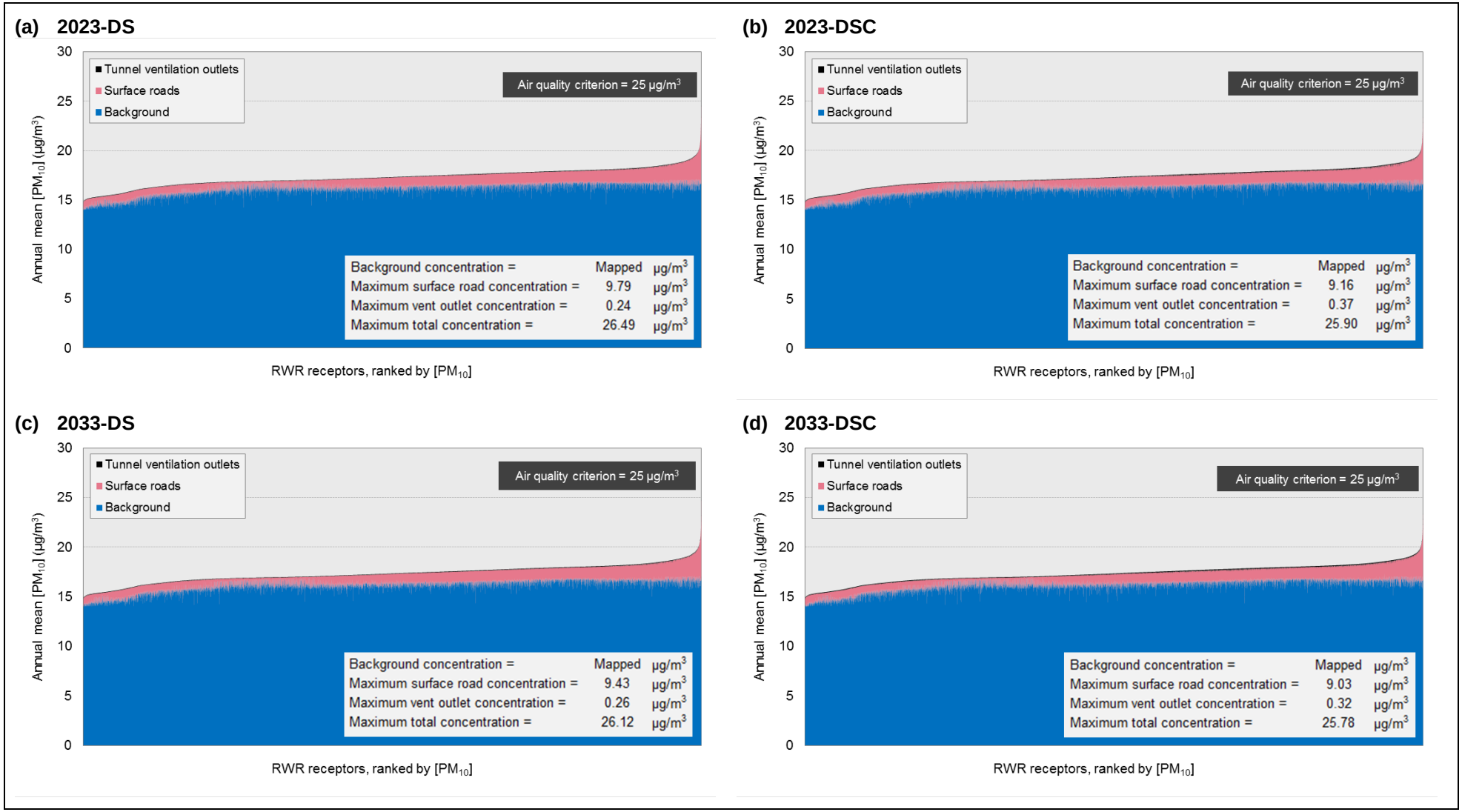

Figure K-50 Source contributions to annual mean PM_{10} concentration at RWR receptors (with-project and cumulative scenarios)

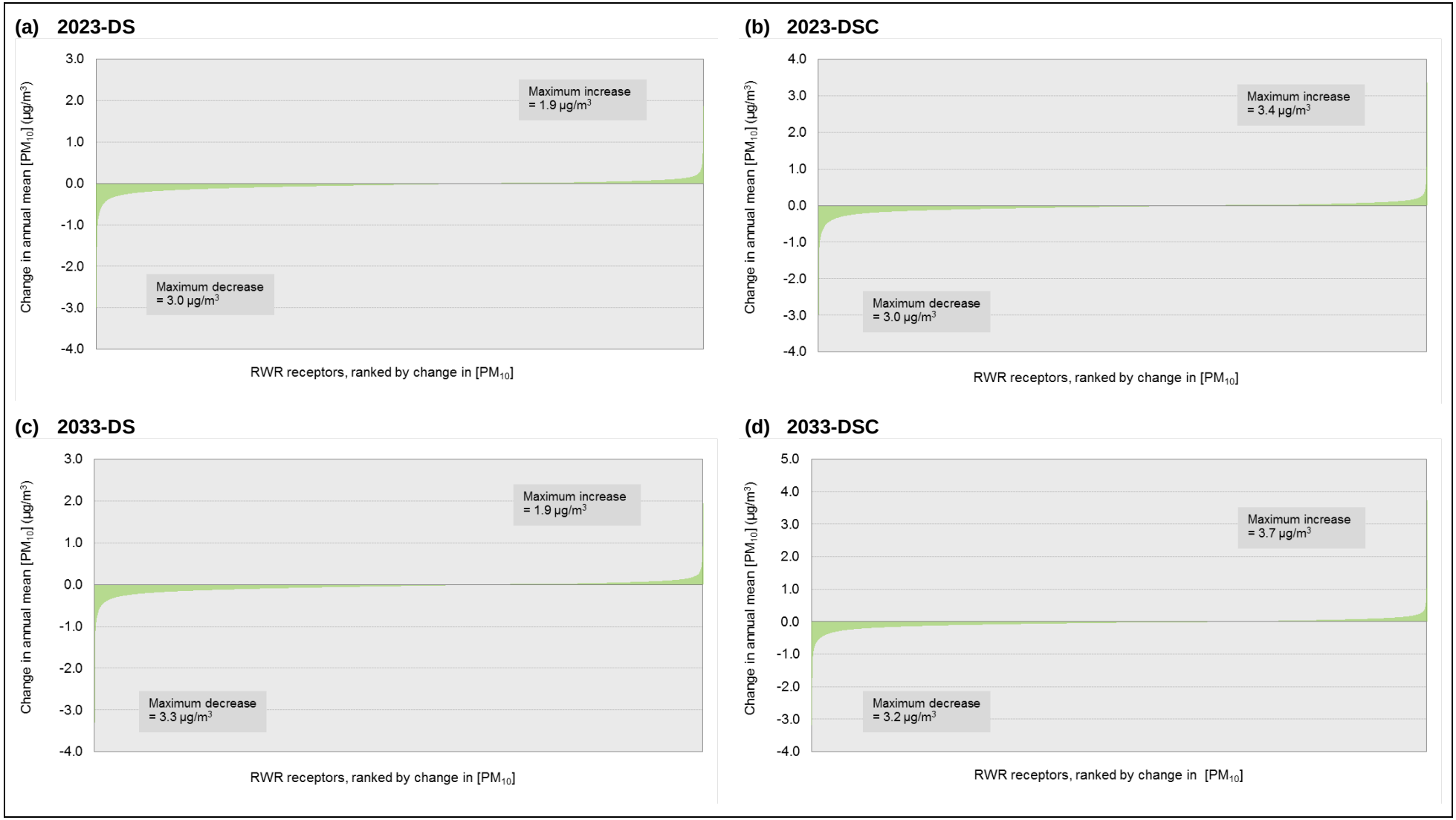

Figure K-51 Changes in annual mean PM_{10} concentration at RWR receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)

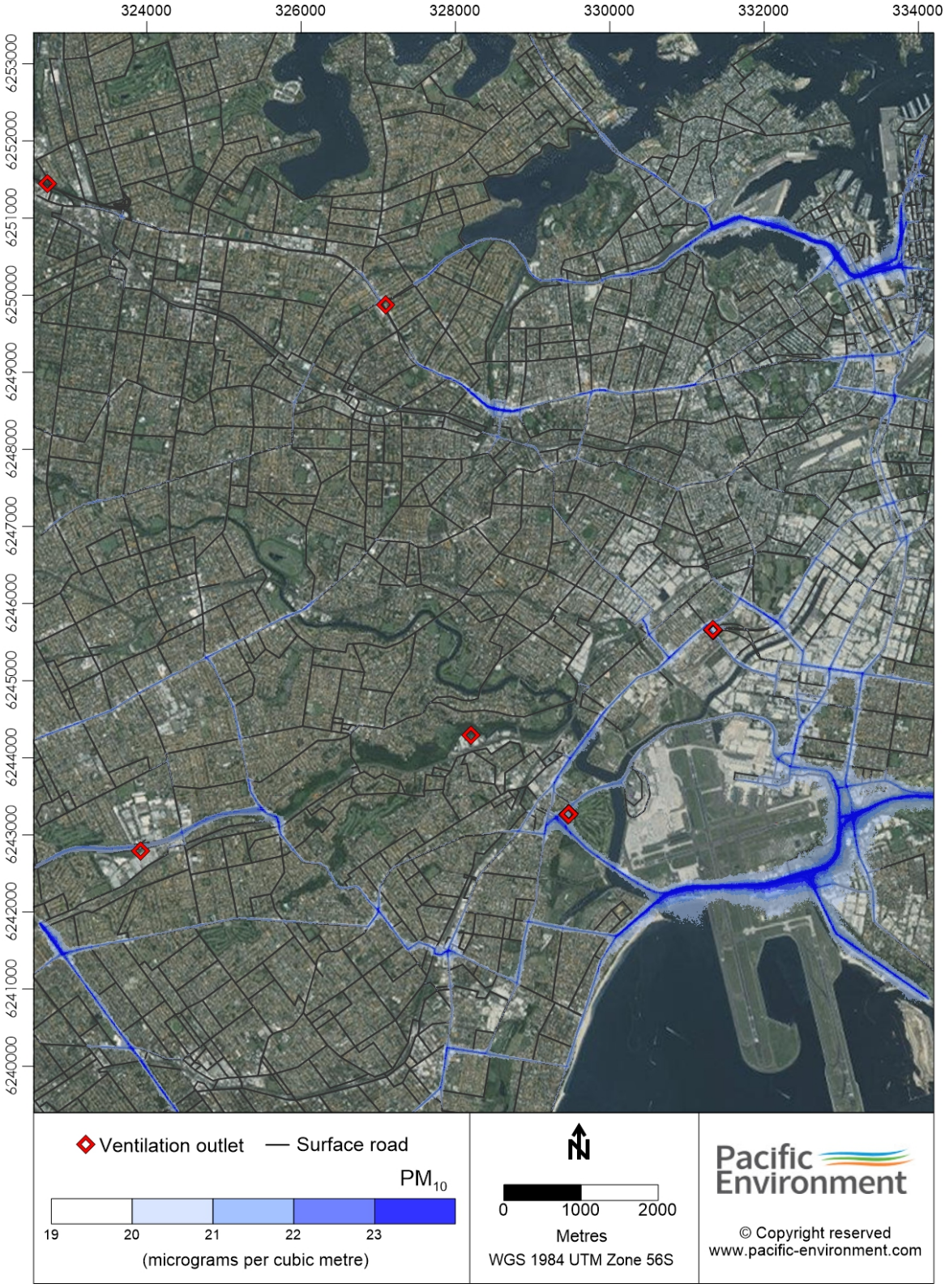

Figure K-52 Contour plot of annual mean PM_{10} concentration in 2023 Do Minimum scenario (all sources, 2023-DM)

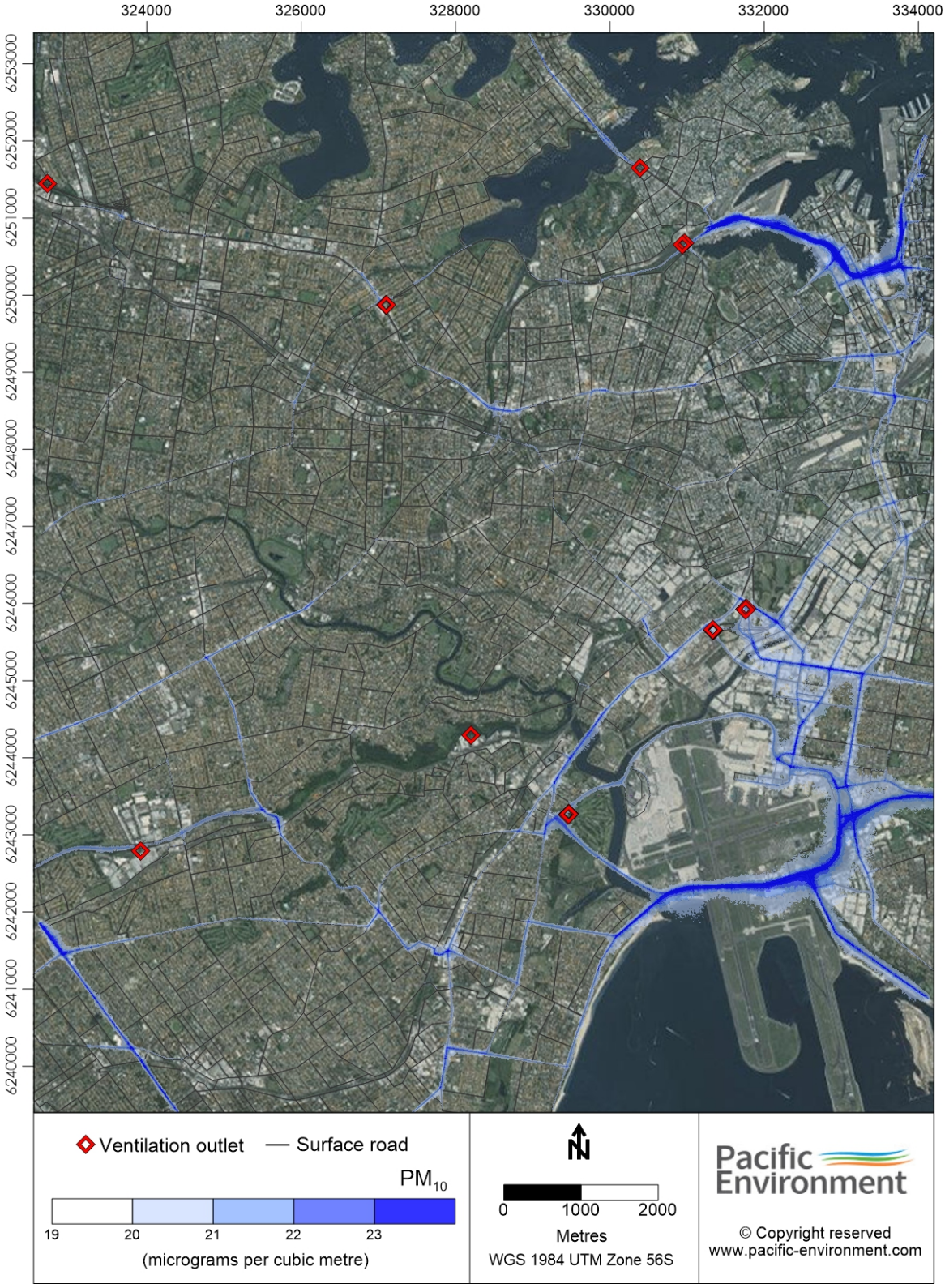

Figure K-53 Contour plot of annual mean PM_{10} concentration in 2023 Do Something scenario (all sources, 2023-DS)

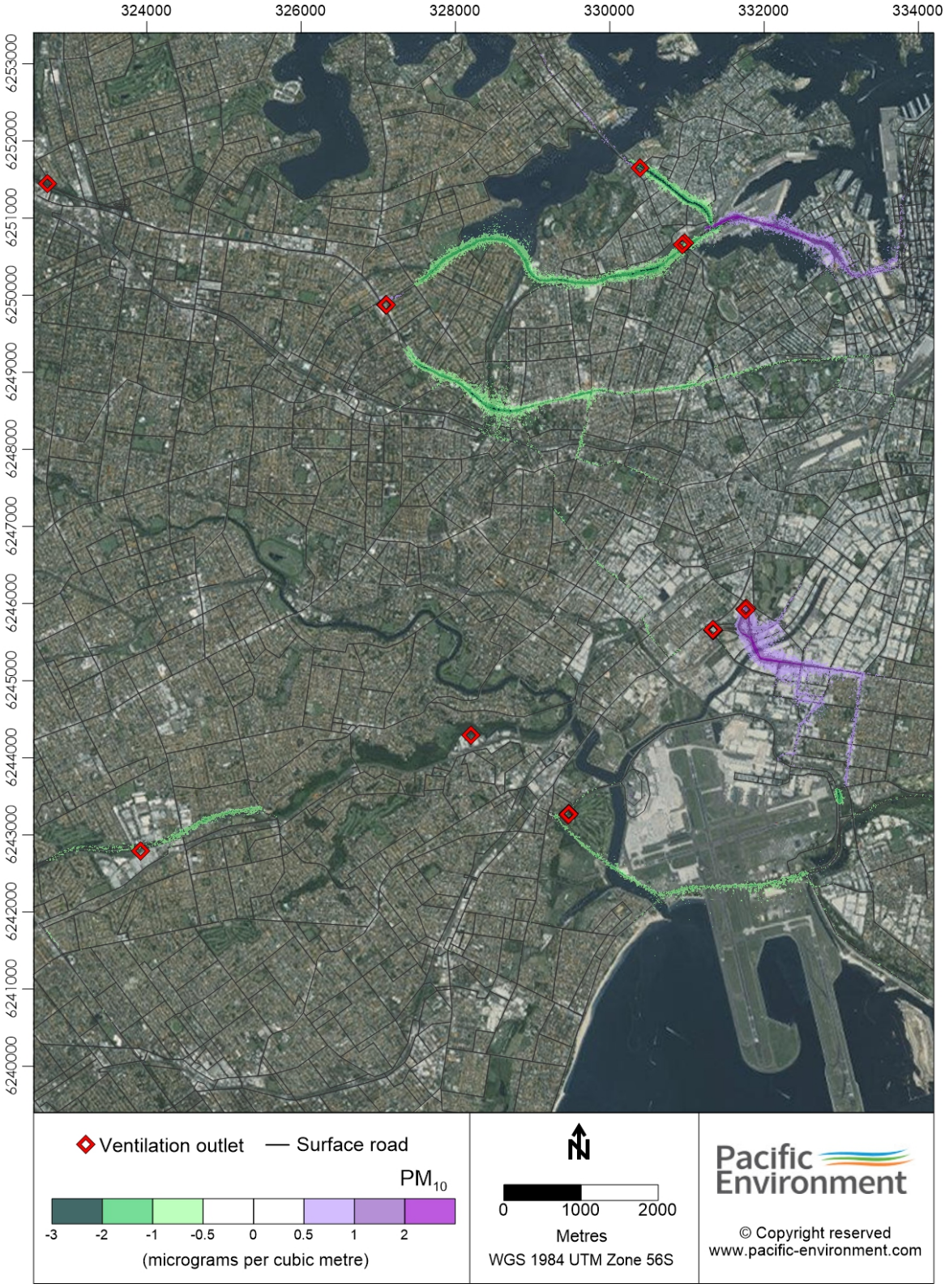

Figure K-54 Contour plot of change in annual mean PM_{10} concentration in 2023 Do something scenario (all sources, 2023-DS minus 2023-DM)

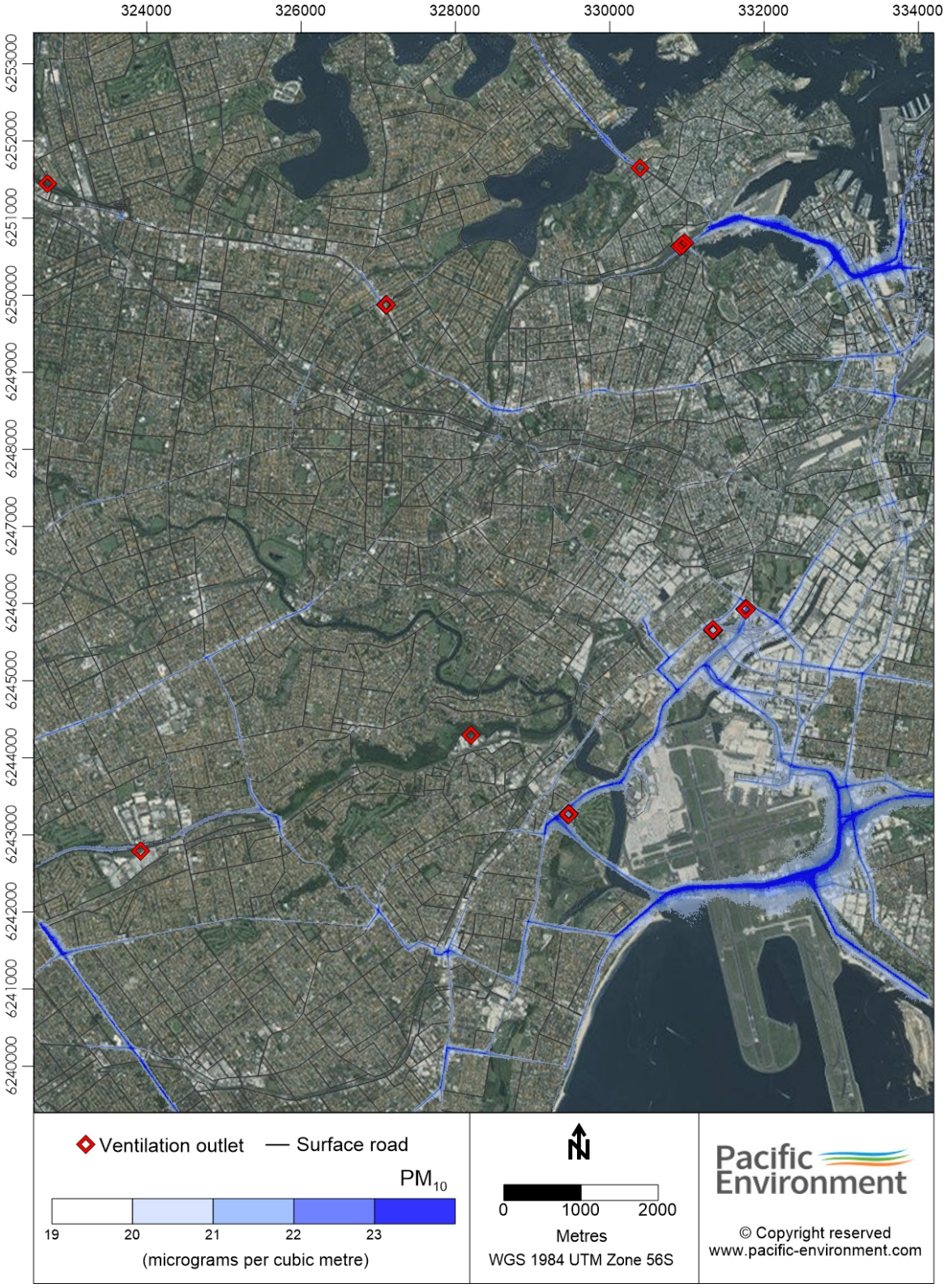

Figure K-55 Contour plot of annual mean PM_{10} concentration in 2023 cumulative scenario (all sources, 2023-DSC)