

Table A-6 CALPUFF Model Results by Scenario¹⁸

CALPUFF Model Results		Scenario 1 (Base Case)		Scenario 2 (CCGT)		Scenario 3 (Nuclear)		Scenario 4 (Control)	
		Ozone Conc. [1]	PM10 Conc. [2]	Ozone Conc. [1]	PM10 Conc. [2]	Ozone Conc. [1]	PM10 Conc. [2]	Ozone Conc. [1]	PM10 Conc. [2]
No.	Census Division Name	(ppb)	(mg/m ³)	(ppb)	(mg/m ³)	(ppb)	(mg/m ³)	(ppb)	(mg/m ³)
1	Stormont, Dundas and Glengarry United Counties	0.00	0.53	0.00	0.01	0.00	0.00	0.00	0.12
2	Prescott and Russell United Counties	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.10
6	Ottawa-Carleton Regional Municipality	0.00	0.56	0.00	0.01	0.00	0.00	0.00	0.13
7	Leeds and Grenville United Counties	0.01	0.67	0.00	0.01	0.00	0.00	0.00	0.16
9	Lanark County	0.00	0.65	0.00	0.01	0.00	0.00	0.00	0.16
10	Frontenac County	0.00	0.66	0.00	0.01	0.00	0.00	0.00	0.17
11	Lennox and Addington County	0.01	0.72	0.00	0.01	0.00	0.01	0.00	0.19
12	Hastings County	0.02	0.74	0.00	0.01	0.00	0.01	0.01	0.20
13	Prince Edward County	0.03	0.74	0.00	0.01	0.00	0.01	0.01	0.20
14	Northumberland County	0.05	0.79	0.01	0.01	0.01	0.01	0.02	0.22
15	Peterborough County	0.02	0.66	0.01	0.01	0.00	0.01	0.01	0.18
16	Victoria County	0.04	0.81	0.01	0.01	0.01	0.01	0.02	0.21
18	Durham Regional Municipality	0.04	1.00	0.02	0.02	0.01	0.01	0.01	0.26
19	York Regional Municipality	0.01	1.07	0.01	0.02	0.01	0.01	0.01	0.27
20	Toronto Metropolitan Municipality	0.03	1.12	0.02	0.02	0.01	0.01	0.01	0.30
21	Peel Regional Municipality	0.01	1.00	0.01	0.02	0.01	0.01	0.00	0.28
22	Dufferin County	0.05	0.81	0.00	0.02	0.00	0.01	0.01	0.21
23	Wellington County	0.09	1.07	0.01	0.02	0.01	0.01	0.03	0.28
24	Halton Regional Municipality	0.06	1.23	0.01	0.02	0.00	0.01	0.02	0.34
25	Hamilton-Wentworth Regional Municipality	0.05	1.65	0.01	0.02	0.00	0.01	0.02	0.44
26	Niagara Regional Municipality	0.34	2.24	0.04	0.02	0.03	0.01	0.09	0.57
28	Haldimand-Norfolk Regional Municipality	1.97	3.93	0.07	0.03	0.04	0.01	1.03	1.24
29	Brant County	0.08	1.81	0.01	0.02	0.00	0.01	0.03	0.45
30	Waterloo Regional Municipality	0.01	1.17	0.00	0.02	0.00	0.01	0.00	0.31
31	Perth County	0.05	0.99	0.00	0.02	0.00	0.01	0.02	0.28
32	Oxford County	0.12	1.52	0.01	0.02	0.00	0.01	0.04	0.40
34	Elgin County	0.14	1.33	0.01	0.01	0.00	0.01	0.06	0.39
36	Kent County	0.21	1.12	0.02	0.01	0.01	0.01	0.13	0.41
37	Essex County	0.01	0.53	0.00	0.01	0.00	0.00	0.01	0.18
38	Lambton County	0.43	1.69	0.03	0.02	0.02	0.01	0.28	0.70
39	Middlesex County	0.06	1.16	0.00	0.01	0.00	0.01	0.03	0.39
40	Huron County	0.04	0.87	0.00	0.01	0.00	0.01	0.02	0.27
41	Bruce County	0.01	0.59	0.00	0.01	0.00	0.00	0.00	0.18
42	Grey County	0.02	0.61	0.00	0.01	0.00	0.00	0.01	0.17
43	Simcoe County	0.02	0.69	0.01	0.01	0.00	0.01	0.01	0.20
44	Muskoka District Municipality	0.00	0.41	0.00	0.01	0.00	0.00	0.00	0.12
46	Haliburton County	0.01	0.46	0.00	0.01	0.00	0.00	0.00	0.12
47	Renfrew County	0.00	0.51	0.00	0.01	0.00	0.00	0.00	0.13
48	Nipissing District	0.00	0.34	0.00	0.01	0.00	0.00	0.00	0.09
49	Parry Sound District	0.00	0.28	0.00	0.01	0.00	0.00	0.00	0.08
51	Manitoulin District	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.07
52	Sudbury District	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.06
53	Sudbury Regional Municipality	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.05
57	Algoma District	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.03

Table 1 Notes:

- [1] Peak daytime 8hr average ozone (O₃) concentrations were derived from modelled NO_x concentrations for 12-8 pm from May 1 to September 30.
- [2] PM₁₀ concentrations are peak are 24-hour average concentrations and include primary PM₁₀ + nitrate + sulphate.

¹⁸ The values in this table are rounded to two decimal places. Impacts were modeled based using the reported precision from CALPUFF.

