

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1244-05
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	8 th December, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0020

**SUBJECT: 6th December, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 6th of December, 2008. Tyler Rowe and Alison Giovannetti of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Cloudy skies
- Temperature: approximately 2°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 0730 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities.*

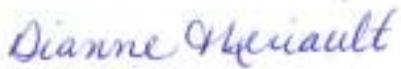
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

All downwind and upwind measurements of Total Volatile Organic Compounds (TVOC) were below the established Site Action Level for this parameter of 0.66 ppm. Each measurement is the average of a 15 minute sample. A minimum of 2 samples were taken downwind and 1 sample upwind every hour. All measurements were found to be below the detection limit of the instrument. Levels above detection limit will be noted in the table below.

Due to operational criteria, during periods of precipitation (snow and rain) and high humidity, TVOC sampling is halted and resumes after the precipitation has ended.

This report has been prepared by Alison Giovannetti and reviewed by Dianne Theriault. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Dianne Theriault, B.Tech
Environmental Technologist
ALL-TECH Environmental Services Cape Breton Ltd.

Copied via e-mail:

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Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
6th December, 2008

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 5m NW of Spar and Spar Rd. ext intersection	0800	155	13	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 Railroad tracks, 30m S of Spar Rd.	0800	155	18	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 Railroad tracks, 30m S of Spar Rd.	0840	155	8	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
4 5m NW of Spar and Spar Rd. ext intersection	0900	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 Railroad tracks, 30m S of Spar Rd.	0900	155	11	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Railroad tracks, 30m S of Spar Rd.	0920	155	8	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
7 5m NW of Spar and Spar Rd. ext intersection	1000	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM ₁₀ Action Level (µg/m ³)	Average Result (µg/m ³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
8 Railroad tracks, 30m S of Spar Rd.	1000	155	9	Northwest	Downwind	Payloader operating	No observations seen to effect sampling integrity
9 Railroad tracks, 30m S of Spar Rd.	1015	155	7	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 5m NW of Spar and Spar Rd. ext intersection	1100	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 Railroad tracks, 30m S of Spar Rd.	1100	155	8	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
12 Railroad tracks, 30m S of Spar Rd.	1130	155	7	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
13 5m NW of Spar and Spar Rd. ext intersection	1200	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 Railroad tracks, 30m S of Spar Rd.	1200	155	13	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 Railroad tracks, 30m S of Spar Rd.	1225	155	8	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM ₁₀ Action Level (µg/m ³)	Average Result (µg/m ³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
16 5m NW of Spar and Spar Rd. ext intersection	1300	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 Railroad tracks, 30m S of Spar Rd.	1300	155	8	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 Railroad tracks, 30m S of Spar Rd.	1345	155	5	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 5m NW of Spar and Spar Rd. ext intersection	1400	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 Railroad tracks, 30m S of Spar Rd.	1400	155	6	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 Railroad tracks, 30m S of Spar Rd.	1435	155	6	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 5m NW of Spar and Spar Rd. ext intersection	1500	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
23 Railroad tracks, 30m S of Spar Rd.	1500	155	6	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM ₁₀ Action Level (µg/m ³)	Average Result (µg/m ³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
24 Railroad tracks, 30m S of Spar Rd.	1520	155	6	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 5m NW of Spar and Spar Rd. ext intersection	1600	155	20	Northwest	Upwind	Background	No observations seen to affect sampling integrity
26 Railroad tracks, 30m S of Spar Rd.	1600	155	5	Northwest	Downwind	Dumptruck operating	No observations seen to effect sampling integrity
27 Railroad tracks, 30m S of Spar Rd.	1615	155	16	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity

Notes: Air sample duration for each monitoring event was 15 minutes.

Comparison of Downwind Daily Results for Dust Budget

Location	Duration	Dust Budget Value ($\mu\text{g}/\text{m}^3$)	Dust Budget Exceedance Value ($\mu\text{g}/\text{m}^3$)
Railroad tracks, 30m S of Spar Rd.	0800 to 0859	13	990
Railroad tracks, 30m S of Spar Rd.	0900 to 0959	23	990
Railroad tracks, 30m S of Spar Rd.	1000 to 1059	31	990
Railroad tracks, 30m S of Spar Rd.	1100 to 1159	39	990
Railroad tracks, 30m S of Spar Rd.	1200 to 1259	50	990
Railroad tracks, 30m S of Spar Rd.	1300 to 1359	57	990
Railroad tracks, 30m S of Spar Rd.	1400 to 1459	63	990
Railroad tracks, 30m S of Spar Rd.	1500 to 1559	69	990
Railroad tracks, 30m S of Spar Rd.	1600 to 1659	80	990

VOC Monitoring

Monitoring Method	Yes	No
Sustained Odours Observed		•
P.I.D. Required	•	