

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1151-14
FROM	Dianne Theriault	SHIFT:	0930 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	25 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CO6II-0014

**SUBJECT: 24th June, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Infrastructure Investigation
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 24th of June, 2008. Tyler Rowe and Reg Peters of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly cloudy, clearing in the afternoon
- Temperature: approximately 20°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on-Site at 0930 and sampling began as soon as weather conditions were within instrument specifications. Air monitoring was performed during EarthTech's construction activities.*

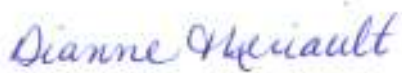
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Tyler Rowe 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 Infrastructure Investigation
24th June, 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 30m Northwest of Coke Ovens security trailer	1030	155	-3	Southwest	Downwind	Excavator operating	Performed re-calibration
2 10m East of Salvation Army	1045	155	10	Southwest	Upwind	Background	No observations seen to effect sampling integrity
3 30m Northwest of Coke Ovens security trailer	1045	155	6	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 10m East of Salvation Army	1100	155	6	Southwest	Upwind	Background	No observations seen to effect sampling integrity
5 30m Northwest of Coke Ovens security trailer	1100	155	5	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 30m Northwest of Coke Ovens security trailer	1135	155	5	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 10m East of Salvation Army	1200	155	6	Southwest	Upwind	Background	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
8 30m Northwest of Coke Ovens security trailer	1200	155	7	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 30m Northwest of Coke Ovens security trailer	1235	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 10m East of Salvation Army	1300	155	10	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 30m Northwest of Coke Ovens security trailer	1300	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 30m Northwest of Coke Ovens security trailer	1330	155	11	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 10m East of Salvation Army	1400	155	9	Southwest	Upwind	Background	No observations seen to effect sampling integrity
14 30m Northwest of Coke Ovens security trailer	1400	155	18	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 30m Northwest of Coke Ovens security trailer	1420	155	9	Southwest	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
16 10m East of Salvation Army	1500	155	8	Southwest	Upwind	Background	No observations seen to effect sampling integrity
17 30m Northwest of Coke Ovens security trailer	1500	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 30m Northwest of Coke Ovens security trailer	1520	155	29	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 10m East of Salvation Army	1600	155	15	Southwest	Upwind	Background	No observations seen to effect sampling integrity
20 30m Northwest of Coke Ovens security trailer	1600	155	18	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 30m Northwest of Coke Ovens security trailer	1630	155	16	Southwest	Downwind	Excavator operating	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 ($\mu\text{g}/\text{m}^3$)
30m Northwest of Coke Ovens security trailer	1000 to 1059	6	990
30m Northwest of Coke Ovens security trailer	1100 to 1159	11	990
30m Northwest of Coke Ovens security trailer	1200 to 1259	19	990
30m Northwest of Coke Ovens security trailer	1300 to 1359	29	990
30m Northwest of Coke Ovens security trailer	1400 to 1459	43	990
30m Northwest of Coke Ovens security trailer	1500 to 1559	63	990
30m Northwest of Coke Ovens security trailer	1600 to 1659	80	990

VOC Monitoring

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