

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1151-01
FROM	Peter Ibrahim	SHIFT:	0630 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	5 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CO6II-0001

**SUBJECT: 4th 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 4th 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:

- Overcast
- Temperature: approximately 15°C
- Wind Direction: West to South

Comments: *ALL-TECH was on-Site at 0630 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 Tyler Rowe and reviewed by Peter Ibrahim. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Peter Ibrahim,
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
4th 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 5m East of Victoria Road bridge	0900	155	17	West	Upwind	Background	No observations seen to effect sampling integrity
2 20m Northwest of Coke Ovens security complex	0900	155	17	West	Downwind	No activity	No observations seen to effect sampling integrity
3 20m Northwest of Coke Ovens security complex	0945	155	12	West	Downwind	No activity	No observations seen to effect sampling integrity
4 5m East of Victoria Road bridge	1000	155	14	West	Upwind	Background	No observations seen to effect sampling integrity
5 20m Northwest of Coke Ovens security complex	1000	155	13	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
6 20m Northwest of Coke Ovens security complex	1035	155	11	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
7 5m East of Victoria Road bridge	1100	155	15	West	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 20m Northwest of Coke Ovens security complex	1100	155	13	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
9 20m Northwest of Coke Ovens security complex	1145	155	14	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
10 5m East of Victoria Road bridge	1200	155	13	West	Upwind	Background	No observations seen to effect sampling integrity
11 20m Northwest of Coke Ovens security complex	1200	155	14	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
12 20m Northwest of Coke Ovens security complex	1245	155	13	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
13 5m East of Victoria Road bridge	1300	155	15	West	Upwind	Background	No observations seen to effect sampling integrity
14 20m Northwest of Coke Ovens security complex	1300	155	14	West	Downwind	Excavator digging	No observations seen to effect sampling integrity
15 20m Northwest of Coke Ovens security complex	1345	155	18	West	Downwind	Excavator digging	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 20m North of Nova Towing	1400	155	17	South	Upwind	Background	No observations seen to effect sampling integrity
17 30m West of Coke Ovens security trailer	1400	155	16	South	Downwind	Excavator digging	No observations seen to effect sampling integrity
18 30m West of Coke Ovens security trailer	1440	155	15	South	Downwind	Excavator digging	No observations seen to effect sampling integrity
19 20m North of Nova Towing	1500	155	19	South	Upwind	Background	No observations seen to effect sampling integrity
20 30m West of Coke Ovens security trailer	1500	155	15	South	Downwind	Excavator digging	No observations seen to effect sampling integrity
21 30m West of Coke Ovens security trailer	1515	155	15	South	Downwind	Excavator digging	No observations seen to effect sampling integrity
22 20m North of Nova Towing	1600	155	18	South	Upwind	Background	No observations seen to effect sampling integrity
23 30m West of Coke Ovens security trailer	1600	155	15	South	Downwind	Excavator digging	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 30m West of Coke Ovens security trailer	1645	155	15	South	Downwind	No activity	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 ($\mu\text{g}/\text{m}^3$)
20m Northwest of Coke Ovens security complex	0900 to 0959	15	990
20m Northwest of Coke Ovens security complex	1000 to 1059	27	990
20m Northwest of Coke Ovens security complex	1100 to 1159	41	990
20m Northwest of Coke Ovens security complex	1200 to 1259	55	990
20m Northwest of Coke Ovens security complex	1300 to 1359	71	990
30m West of Coke Ovens security trailer	1400 to 1459	87	990
30m West of Coke Ovens security trailer	1500 to 1559	102	990
30m West of Coke Ovens security trailer	1600 to 1659	118	990

VOC Monitoring

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