

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1151-06
FROM	Peter Ibrahim	SHIFT:	0730 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	12 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CO6II-0006

**SUBJECT: 11th 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 11th of June, 2008. Tyler Rowe and Peter Ibrahim of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly overcast
- Temperature: approximately 18°C
- Wind Direction: Southwest

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 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
11th 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 150m North of Nova Towing	0900	155	6	Southwest	Upwind	Background	No observations seen to effect sampling integrity
2 160m East of Spar Road and Lingan Road intersection	0910	155	4	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
3 160m East of Spar Road and Lingan Road intersection	0930	155	5	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 150m North of Nova Towing	1000	155	7	Southwest	Upwind	Background	No observations seen to effect sampling integrity
5 160m East of Spar Road and Lingan Road intersection	1017	155	21	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 160m East of Spar Road and Lingan Road intersection	1033	155	30	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 150m North of Nova Towing	1100	155	10	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 160m East of Spar Road and Lingan Road intersection	1119	155	7	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 160m East of Spar Road and Lingan Road intersection	1136	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 150m North of Nova Towing	1200	155	7	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 160m East of Spar Road and Lingan Road intersection	1235	155	19	Southwest	Downwind	No Activity	No observations seen to effect sampling integrity
12 160m East of Spar Road and Lingan Road intersection	1250	155	23	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 150m North of Nova Towing	1300	155	8	Southwest	Upwind	Background	No observations seen to effect sampling integrity
14 160m East of Spar Road and Lingan Road intersection	1307	155	23	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 160m East of Spar Road and Lingan Road intersection	1351	155	28	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 150m North of Nova Towing	1410	155	7	Southwest	Upwind	Background	No observations seen to effect sampling integrity
17 150m North of Nova Towing	1500	155	6	Southwest	Upwind	Background	No observations seen to effect sampling integrity
18 160m East of Spar Road and Lingan Road intersection	1507	155	23	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 160m East of Spar Road and Lingan Road intersection	1523	155	20	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
20 150m North of Nova Towing	1600	155	6	Southwest	Upwind	Background	No observations seen to effect sampling integrity
21 160m East of Spar Road and Lingan Road intersection	1615	155	34	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 160m East of Spar Road and Lingan Road intersection	1630	155	25	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 ($\mu\text{g}/\text{m}^3$)
Spar Road, 160m West of traffic lights	0900 to 0959	5	990
Spar Road, 160m West of traffic lights	1000 to 1059	31	990
Spar Road, 160m West of traffic lights	1100 to 1159	39	990
Spar Road, 160m West of traffic lights	1200 to 1259	60	990
Spar Road, 160m West of traffic lights	1300 to 1359	86	990
Spar Road, 160m West of traffic lights	1500 to 1559	108	990
Spar Road, 160m West of traffic lights	1600 to 1659	138	990

VOC Monitoring

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