

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1151-04
FROM	Peter Ibrahim	SHIFT:	0730 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	10 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CO6II-0004

**SUBJECT: 9th 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 9th of June, 2008. Tyler Rowe, Darren Lawless 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:

- Overcast
- Temperature: approximately 13°C
- Wind Direction: West to Northeast

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 and Dianne Theriault. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

ORIGINAL SIGNED

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
9th 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 Victoria Road Fixed Station Location	0823	155	6	West	Upwind	Background	No observations seen to effect sampling integrity
2 Southwest corner of Coke Ovens security complex	0825	155	8	West	Downwind	No Activity Observed on-site	No observations seen to effect sampling integrity
3 Southwest corner of Coke Ovens security complex	0845	155	9	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 Victoria Road Fixed Station Location	0900	155	9	West	Upwind	Background	No observations seen to effect sampling integrity
5 Southwest corner of Coke Ovens security complex	0900	155	10	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Southwest corner of Coke Ovens security complex	0930	155	12	West	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
7 Victoria Road Fixed Station Location	1000	155	14	West	Upwind	Background	No observations seen to effect sampling integrity
8 Southwest corner of Coke Ovens security complex	1000	155	19	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 50m SW of Coke Oven Security Complex	1035	155	20	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 Coke Oven Brook Main Gate off Victoria Road	1100	155	23	Northwest	Upwind	Background	No observations seen to effect sampling integrity
11 50m SW of Coke Oven Security Complex	1100	155	24	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 50m SW of Coke Oven Security Complex	1120	155	24	Northwest	Downwind	No Activity Observed on-site	No observations seen to effect sampling integrity
13 Coke Oven Brook Main Gate off Victoria Road	1200	155	23	Northwest	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
14 50m SW of Coke Oven Security Complex	1200	155	25	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 50m SW of Coke Oven Security Complex	1215	155	20	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
16 Northwest corner of Coke Ovens security complex	1315	155	21	Northeast	Upwind	Background	No observations seen to effect sampling integrity
17 170m North of Nova Towing	1315	155	22	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 170m North of Nova Towing	1345	155	28	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 Northwest corner of Coke Ovens security complex	1400	155	21	Northeast	Upwind	Background	No observations seen to effect sampling integrity
20 170m North of Nova Towing	1400	155	24	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 170m North of Nova Towing	1430	155	15	Northeast	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
22 150 West of Lights (Spar Rd and Lingan Rd) on Spar Road	1500	155	27	Northeast	Upwind	Background	No observations seen to effect sampling integrity
23 170m North of Nova Towing	1500	155	19	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
24 170m North of Nova Towing	1525	155	12	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 150 West of Lights (Spar Rd and Lingan Rd) on Spar Road	1600	155	5	Northeast	Upwind	Background	No observations seen to effect sampling integrity
26 170m North of Nova Towing	1600	155	8	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
27 170m North of Nova Towing	1630	155	7	Northeast	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 ($\mu\text{g}/\text{m}^3$)
Southwest corner of Coke Ovens security complex	0800 to 859	8	990
Southwest corner of Coke Ovens security complex	0900 to 0959	19	990
Near Coke Ovens Security Complex	1000 to 1059	38	990
Near Coke Ovens Security Complex	1100 to 1159	62	990
Near Coke Ovens Security Complex	1200 to 1259	85	990
170m North of Nova Towing	1300 to 1359	105	990
170m North of Nova Towing	1400 to 1459	123	990
170m North of Nova Towing	1500 to 1559	139	990
170m North of Nova Towing	1600 to 1659	147	990

VOC Monitoring

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