

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1151-02
FROM	Peter Ibrahim	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	6 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CO6II-0002

**SUBJECT: 5th 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 5th of June, 2008. Tyler Rowe and Alex Tchiguirev of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Overcast giving way to sunny periods
- Temperature: approximately 15°C
- Wind Direction: 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. 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
5th 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 Southwest corner of Coke Ovens security complex	0900	155	6	Northeast	Upwind	Background	No observations seen to effect sampling integrity
2 10m Northeast of Victoria Road fixed station	0900	155	5	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
3 10m Northeast of Victoria Road fixed station	0930	155	5	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 Southwest corner of Coke Ovens security complex	1000	155	4	Northeast	Upwind	Background	No observations seen to effect sampling integrity
5 10m Northeast of Victoria Road fixed station	1000	155	4	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 10m Northeast of Victoria Road fixed station	1030	155	4	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 Southwest corner of Coke Ovens security complex	1100	155	5	Northeast	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 10m Northeast of Victoria Road fixed station	1100	155	5	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 10m Northeast of Victoria Road fixed station	1130	155	4	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 Southwest corner of Coke Ovens security complex	1200	155	5	Northeast	Upwind	Background	No observations seen to effect sampling integrity
11 10m Northeast of Victoria Road fixed station	1200	155	5	Northeast	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
12 10m Northeast of Victoria Road fixed station	1230	155	5	Northeast	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
13 Southwest corner of Coke Ovens security complex	1300	155	8	Northeast	Upwind	Background	No observations seen to effect sampling integrity
14 10m Northeast of Victoria Road fixed station	1300	155	7	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 10m Northeast of Victoria Road fixed station	1330	155	6	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
16 Southwest corner of Coke Ovens security complex	1400	155	7	Northeast	Upwind	Background	No observations seen to effect sampling integrity
17 10m Northeast of Victoria Road fixed station	1400	155	6	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 10m Northeast of Victoria Road fixed station	1440	155	5	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 Southwest corner of Coke Ovens security complex	1500	155	5	Northeast	Upwind	Background	No observations seen to effect sampling integrity
20 10m Northeast of Victoria Road fixed station	1500	155	8	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 10m Northeast of Victoria Road fixed station	1538	155	4	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 Southwest corner of Coke Ovens security complex	1600	155	6	Northeast	Upwind	Background	No observations seen to effect sampling integrity
23 10m Northeast of Victoria Road fixed station	1600	155	5	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
24 10m Northeast of Victoria Road fixed station	1615	155	4	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 ($\mu\text{g}/\text{m}^3$)
10m Northeast of Victoria Road fixed station	0900 to 0959	5	990
10m Northeast of Victoria Road fixed station	1000 to 1059	9	990
10m Northeast of Victoria Road fixed station	1100 to 1159	14	990
10m Northeast of Victoria Road fixed station	1200 to 1259	19	990
10m Northeast of Victoria Road fixed station	1300 to 1359	26	990
10m Northeast of Victoria Road fixed station	1400 to 1459	32	990
10m Northeast of Victoria Road fixed station	1500 to 1559	37	990
10m Northeast of Victoria Road fixed station	1600 to 1659	42	990

VOC Monitoring

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