

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-04
FROM	Dianne Theriault	SHIFT:	0630 to 1815
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381	STPA NO.	COCW-0004
DATE	18 th November, 2008		

**SUBJECT: 17th November 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cut Off Walls
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 17th of November, 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 Sunny
- Temperature: approximately 9°C
- Wind Direction: Southwest

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 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 Vertical Cut Off Walls
17th November, 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 40m West of Victoria road bridge	0700	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 Spar Road, 100m West of Lingan Road	0700	155	6	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 Spar Road, 100m West of Lingan Road	0735	155	4	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 40m West of Victoria road bridge	0800	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 Spar Road, 100m West of Lingan Road	0800	155	3	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Spar Road, 100m West of Lingan Road	0820	155	4	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 40m West of Victoria road bridge	0900	155	8	Southwest	Upwind	Background	No observations seen to affect 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 Spar Road, 100m West of Lingan Road	0900	155	4	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 Spar Road, 100m West of Lingan Road	0920	155	5	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 40m West of Victoria road bridge	1000	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 Spar Road, 100m West of Lingan Road	1000	155	9	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
12 Spar Road, 100m West of Lingan Road	1045	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 40m West of Victoria road bridge	1100	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 Spar Road, 100m West of Lingan Road	1100	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 Spar Road, 100m West of Lingan Road	1140	155	10	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 40m West of Victoria road bridge	1200	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 Spar Road, 100m West of Lingan Road	1200	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 Spar Road, 100m West of Lingan Road	1230	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 40m West of Victoria road bridge	1300	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 Spar Road, 100m West of Lingan Road	1300	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 Spar Road, 100m West of Lingan Road	1345	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 40m West of Victoria road bridge	1400	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 Spar Road, 100m West of Lingan Road	1400	155	11	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
24 Spar Road, 100m West of Lingan Road	1435	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 40m West of Victoria road bridge	1500	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 Spar Road, 100m West of Lingan Road	1500	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
27 Spar Road, 100m West of Lingan Road	1535	155	8	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
28 40m West of Victoria road bridge	1600	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
29 Spar Road, 100m West of Lingan Road	1600	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
30 Spar Road, 100m West of Lingan Road	1630	155	8	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
31 40m West of Victoria road bridge	1700	155	5	Southwest	Upwind	Background	No observations seen to affect 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
32 Spar Road, 100m West of Lingan Road	1700	155	7	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
33 Spar Road, 100m West of Lingan Road	1730	155	5	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, 100m West of Lingan Road	0700 to 0759	5	990
Spar Road, 100m West of Lingan Road	0800 to 0859	9	990
Spar Road, 100m West of Lingan Road	0900 to 0959	14	990
Spar Road, 100m West of Lingan Road	1000 to 1059	23	990
Spar Road, 100m West of Lingan Road	1100 to 1159	33	990
Spar Road, 100m West of Lingan Road	1200 to 1259	43	990
Spar Road, 100m West of Lingan Road	1300 to 1359	53	990
Spar Road, 100m West of Lingan Road	1400 to 1459	63	990
Spar Road, 100m West of Lingan Road	1500 to 1559	72	990
Spar Road, 100m West of Lingan Road	1600 to 1659	81	990
Spar Road, 100m West of Lingan Road	1700 to 1759	87	990

VOC Monitoring

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