

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-13
FROM	Dianne Theriault	SHIFT:	0630 to 1745
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	29 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0013

**SUBJECT: 28th November, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 28th of November, 2008. Tyler Rowe and Alison Giovannetti 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 8°C
- Wind Direction: Northwest to Northeast to 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.*

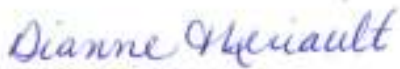
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Cutoff Walls
28th 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 Spar Road, 20m East of Millcreek gate	0700	155	30	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 100m East of Victoria Road bridge along train tracks	0700	155	9	Northwest	Downwind	Trucks moving material	No observations seen to effect sampling integrity
3 100m East of Victoria Road bridge along train tracks	0720	155	8	Northwest	Downwind	Trucks moving material	No observations seen to effect sampling integrity
4 Spar Road, 25m East of Lingan Road	0800	155	14	Northeast	Upwind	Background	No observations seen to affect sampling integrity
5 15m East of Victoria Road bridge along train tracks	0800	155	10	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 15m East of Victoria Road bridge along train tracks	0840	155	24	Northeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 30m West of Victoria Road	0900	155	18	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	19	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 Spar Road, 95m West of Lingan Road	0930	155	20	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 30m West of Victoria Road	1000	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 Spar Road, 95m West of Lingan Road	1000	155	21	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
12 Spar Road, 95m West of Lingan Road	1050	155	18	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
13 30m West of Victoria Road	1100	155	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 Spar Road, 95m West of Lingan Road	1115	155	34	Southwest	Downwind	Truck dumping gravel	Visible dust from site activities
15 Spar Road, 95m West of Lingan Road	1145	155	46	Southwest	Downwind	Machines moving material	Visible dust from site activities

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 30m West of Victoria Road	1200	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 Spar Road, 95m West of Lingan Road	1200	155	18	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
18 Spar Road, 95m West of Lingan Road	1230	155	14	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
19 30m West of Victoria Road	1300	155	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 Spar Road, 95m West of Lingan Road	1300	155	15	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
21 Spar Road, 95m West of Lingan Road	1335	155	15	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
22 30m West of Victoria Road	1400	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 Spar Road, 95m West of Lingan Road	1400	155	15	Southwest	Downwind	Machines moving material	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, 95m West of Lingan Road	1445	155	17	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
25 30m West of Victoria Road	1500	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 Spar Road, 95m West of Lingan Road	1500	155	17	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
27 Spar Road, 95m West of Lingan Road	1520	155	17	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
28 30m West of Victoria Road	1600	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
29 Spar Road, 95m West of Lingan Road	1600	155	30	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
30 Spar Road, 95m West of Lingan Road	1630	155	22	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
31 30m West of Victoria Road	1700	155	29	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, 95m West of Lingan Road	1700	155	24	Southwest	Downwind	No activity observed on site	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 ($\mu\text{g}/\text{m}^3$)
100m East of Victoria Road bridge along train tracks	0700 to 0759	9	990
15m East of Victoria Road bridge along train tracks	0800 to 0859	26	990
Spar Road, 100m West of Lingan Road	0900 to 0959	46	990
Spar Road, 95m West of Lingan Road	1000 to 1059	66	990
Spar Road, 95m West of Lingan Road	1100 to 1159	106	990
Spar Road, 95m West of Lingan Road	1200 to 1259	122	990
Spar Road, 95m West of Lingan Road	1300 to 1359	137	990
Spar Road, 95m West of Lingan Road	1400 to 1459	153	990
Spar Road, 95m West of Lingan Road	1500 to 1559	170	990
Spar Road, 95m West of Lingan Road	1600 to 1659	196	990
Spar Road, 95m West of Lingan Road	1700 to 1759	220	990

VOC Monitoring

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