

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-14
FROM	Dianne Theriault	SHIFT:	0730 to 1630
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-0014

**SUBJECT: 29th 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 29th of November, 2008. Jennifer Andrews and Colin MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Rain, then cloudy with sunny periods
- Temperature: approximately 8°C
- Wind Direction: Southeast

Comments: *ALL-TECH was on-Site at 0730 and sampling began as soon as there was site activity. Air monitoring was put on standby between 1000 and 1300 due to precipitation. Air monitoring was performed during EarthTech's construction activities.*

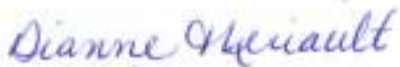
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Jennifer Andrews 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
29th 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 15m East of Victoria Bridge	0800	155	11	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 30m South of Sparr Rd, Sparr Extension Intersection	0800	155	10	Southeast	Downwind	Trucks moving material	No observations seen to effect sampling integrity
3 30m South of Sparr Rd, Sparr Extension Intersection	0830	155	13	Southeast	Downwind	Trucks moving material	No observations seen to effect sampling integrity
4 15m East of Victoria Bridge	0900	155	15	Southeast	Upwind	Background	No observations seen to affect sampling integrity
5 60m East of Sparr Rd., Sparr Extension Intersection	0900	155	21	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 60m East of Sparr Rd., Sparr Extension Intersection	0915	155	21	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 15m East of Victoria Bridge	1300	155	21	Southeast	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 60m East of Sparr Rd., Sparr Extension Intersection	1300	155	27	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 60m East of Sparr Rd., Sparr Extension Intersection	1345	155	28	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 15m East of Victoria Bridge	1400	155	25	Southeast	Upwind	Background	No observations seen to affect sampling integrity
11 60m East of Sparr Rd., Sparr Extension Intersection	1400	155	29	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
12 60m East of Sparr Rd., Sparr Extension Intersection	1445	155	19	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
13 15m East of Victoria Bridge	1500	155	16	Southeast	Upwind	Background	No observations seen to affect sampling integrity
14 60m East of Sparr Rd., Sparr Extension Intersection	1500	155	17	Southeast	Downwind	Truck dumping gravel	No observations seen to affect sampling integrity
15 60m East of Sparr Rd., Sparr Extension Intersection	1545	155	15	Southeast	Downwind	Machines moving material	No observations seen to affect 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 ($\mu\text{g}/\text{m}^3$)
60m East of Sparr Rd., Sparr Extension Intersection	0800 to 0859	12	990
60m East of Sparr Rd., Sparr Extension Intersection	0900 to 0959	33	990
60m East of Sparr Rd., Sparr Extension Intersection	1300 to 1359	61	990
60m East of Sparr Rd., Sparr Extension Intersection	1400 to 1459	85	990
60m East of Sparr Rd., Sparr Extension Intersection	1500 to 1559	101	990

VOC Monitoring

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