

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-12
FROM	Dianne Theriault	SHIFT:	1030 to 1745
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	28 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0012

**SUBJECT: 27th 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 27th of November, 2008. Jennifer Andrews and Reggie Peters of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Rain in the morning, then mainly cloudy
- Temperature: approximately 9°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on standby until 1030 when weather conditions were within instrument specifications. Air monitoring was performed during EarthTech's construction activities.*

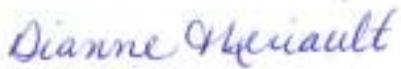
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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
27th 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 5m E of Stop Sign on Sparr Rd. by overpass	1145	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 200m SW of Sparr & Lingan Intersection	1130	155	4	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
3 200m SW of Sparr & Lingan Intersection	1145	155	7	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
4 5m E of Stop Sign on Sparr Rd. by overpass	1200	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 200m SW of Sparr & Lingan Intersection	1200	155	6	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
6 200m SW of Sparr & Lingan Intersection	1220	155	4	Northwest	Downwind	Machines in Operation	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
7 5m E of Stop Sign on Sparr Rd. by overpass	1300	155	3	Northwest	Upwind	Background	No observations seen to affect sampling integrity
8 200m SW of Sparr & Lingan Intersection	1300	155	3	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
9 200m SW of Sparr & Lingan Intersection	1330	155	5	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
10 5m E of Stop Sign on Sparr Rd. by overpass	1400	155	39	Northwest	Upwind	Background	Vehicle traffic
11 200m SW of Sparr & Lingan Intersection	1400	155	5	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
12 200m SW of Sparr & Lingan Intersection	1440	155	9	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
13 5m E of Stop Sign on Sparr Rd. by overpass	1500	155	12	Northwest	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
14 200m SW of Sparr & Lingan Intersection	1500	155	7	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
15 200m SW of Sparr & Lingan Intersection	1525	155	8	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
16 5m E of Stop Sign on Sparr Rd. by overpass	1600	155	25	Northwest	Upwind	Background	Vehicle traffic
17 200m SW of Sparr & Lingan Intersection	1600	155	9	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
18 200m SW of Sparr & Lingan Intersection	1645	155	16	Northwest	Downwind	Machines in Operation	No observations seen to affect sampling integrity
19 5m E of Stop Sign on Sparr Rd. by overpass	1700	155	28	Northwest	Upwind	Background	Vehicle traffic
20 200m SW of Sparr & Lingan Intersection	1700	155	14	Northwest	Downwind	No activity observed on site	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 ($\mu\text{g}/\text{m}^3$)
200m SW of Sparr & Lingan Intersection	1100 to 1159	6	990
200m SW of Sparr & Lingan Intersection	1200 to 1259	9	990
200m SW of Sparr & Lingan Intersection	1300 to 1359	13	990
200m SW of Sparr & Lingan Intersection	1400 to 1459	20	990
200m SW of Sparr & Lingan Intersection	1500 to 1559	28	990
200m SW of Sparr & Lingan Intersection	1600 to 1659	41	990
200m SW of Sparr & Lingan Intersection	1700 to 1759	55	990

VOC Monitoring

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