

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-06
FROM	Dianne Theriault	SHIFT:	0630 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	21 st November, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0006

**SUBJECT: 20th 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 20th of November, 2008. Colin MacIsaac, Jennifer Andrews 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 cloudy, flurries
- Temperature: approximately 3°C
- Wind Direction: West

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.*

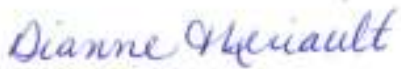
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Alison Giovannetti 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
20th 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 20m S of Sparr and Sparr Rd. Ext Intersection	0730	155	2	West	Upwind	Background	No observations seen to affect sampling integrity
2 40m E of Victoria Rd. Bridge	0730	155	4	West	Downwind	Personnel working on site	No observations seen to effect sampling integrity
3 40m E of Victoria Rd. Bridge	0745	155	3	West	Downwind	Personnel working on site	No observations seen to effect sampling integrity
4 20m S of Sparr and Sparr Rd. Ext Intersection	0800	155	3	West	Upwind	Background	No observations seen to affect sampling integrity
5 60m SW of Lingan and Sparr Rd. Intersection	0800	155	2	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
6 60m SW of Lingan and Sparr Rd. Intersection	0845	155	2	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
7 20m S of Sparr and Sparr Rd. Ext Intersection	0900	155	1	West	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 SW of Lingan and Sparr Rd. Intersection	0900	155	3	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
9 60m SW of Lingan and Sparr Rd. Intersection	0930	155	1	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
10 20m S of Sparr and Sparr Rd. Ext Intersection	1000	155	2	West	Upwind	Background	No observations seen to affect sampling integrity
11 60m SW of Lingan and Sparr Rd. Intersection	1000	155	3	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
12 60m SW of Lingan and Sparr Rd. Intersection	1045	155	4	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
13 20m S of Sparr and Sparr Rd. Ext Intersection	1100	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
14 60m SW of Lingan and Sparr Rd. Intersection	1100	155	7	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
15 20m S of Sparr and Sparr Rd. Ext Intersection	1200	155	3	West	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
16 60m SW of Lingan and Sparr Rd. Intersection	1200	155	4	West	Downwind	Excavators in operation	No observations seen to affect sampling integrity
17 60m SW of Lingan and Sparr Rd. Intersection	1220	155	6	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
18 20m S of Sparr and Sparr Rd. Ext Intersection	1300	155	3	West	Upwind	Background	No observations seen to effect sampling integrity
19 60m SW of Lingan and Sparr Rd. Intersection	1300	155	3	West	Downwind	Excavators in operation	No observations seen to affect sampling integrity
20 60m SW of Lingan and Sparr Rd. Intersection	1345	155	5	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
21 20m S of Sparr and Sparr Rd. Ext Intersection	1400	155	5	West	Upwind	Background	No observations seen to effect sampling integrity
22 60m SW of Lingan and Sparr Rd. Intersection	1400	155	6	West	Downwind	Excavators in operation	No observations seen to affect sampling integrity
23 60m SW of Lingan and Sparr Rd. Intersection	1425	155	6	West	Downwind	Excavators in operation	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 20m S of Sparr and Sparr Rd. Ext Intersection	1500	155	8	West	Upwind	Background	No observations seen to effect sampling integrity
25 60m SW of Lingan and Sparr Rd. Intersection	1500	155	6	West	Downwind	Excavators in operation	No observations seen to affect sampling integrity
26 60m SW of Lingan and Sparr Rd. Intersection	1515	155	8	West	Downwind	Excavators in operation	No observations seen to effect sampling integrity
27 20m S of Sparr and Sparr Rd. Ext Intersection	1600	155	8	West	Upwind	Background	No observations seen to effect sampling integrity
28 60m SW of Lingan and Sparr Rd. Intersection	1600	155	7	West	Downwind	Excavators in operation	No observations seen to affect sampling integrity
29 60m SW of Lingan and Sparr Rd. Intersection	1615	155	6	West	Downwind	Excavators in operation	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 ($\mu\text{g}/\text{m}^3$)
40m E of Victoria Rd. Bridge	0700 to 0759	4	990
60m SW of Lingan and Sparr Rd. Intersection	0800 to 0859	6	990
60m SW of Lingan and Sparr Rd. Intersection	0900 to 0959	8	990
60m SW of Lingan and Sparr Rd. Intersection	1000 to 1059	11	990
60m SW of Lingan and Sparr Rd. Intersection	1100 to 1159	17	990
60m SW of Lingan and Sparr Rd. Intersection	1200 to 1259	21	990
60m SW of Lingan and Sparr Rd. Intersection	1300 to 1359	26	990
60m SW of Lingan and Sparr Rd. Intersection	1400 to 1459	32	990
60m SW of Lingan and Sparr Rd. Intersection	1500 to 1559	39	990
60m SW of Lingan and Sparr Rd. Intersection	1600 to 1659	46	990

VOC Monitoring

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