

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1244-01
FROM	Dianne Theriault	SHIFT:	0630 to 1545
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	2 nd December, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0016

**SUBJECT: 2nd December, 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 2nd of December, 2008. Reg Peters 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, sunny periods
- 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 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
2nd December, 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 300m S of Spar and Spar Ext Intersection near overpass	0700	155	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 90m SW of Spar and Lingan Rd. Intersection	0700	155	15	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 90m SW of Spar and Lingan Rd. Intersection	0740	155	15	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
4 300m S of Spar and Spar Ext Intersection near overpass	0800	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 90m SW of Spar and Lingan Rd. Intersection	0800	155	16	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
6 90m SW of Spar and Lingan Rd. Intersection	0830	155	18	Southwest	Downwind	Equipment operating	No observations seen to effect sampling integrity
7 300m S of Spar and Spar Ext Intersection near overpass	0900	155	28	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 90m SW of Spar and Lingan Rd. Intersection	0900	155	20	Southwest	Downwind	Equipment operating	No observations seen to effect sampling integrity
9 90m SW of Spar and Lingan Rd. Intersection	0915	155	22	Southwest	Downwind	Equipment operating	No observations seen to effect sampling integrity
10 300m S of Spar and Spar Ext Intersection near overpass	1000	155	31	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 90m SW of Spar and Lingan Rd. Intersection	1000	155	23	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
12 90m SW of Spar and Lingan Rd. Intersection	1025	155	23	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
13 300m S of Spar and Spar Ext Intersection near overpass	1100	155	29	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 90m SW of Spar and Lingan Rd. Intersection	1100	155	23	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 90m SW of Spar and Lingan Rd. Intersection	1130	155	21	Southwest	Downwind	No activity observed on site	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
16 300m S of Spar and Spar Ext Intersection near overpass	1200	155	21	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 90m SW of Spar and Lingan Rd. Intersection	1200	155	20	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
18 90m SW of Spar and Lingan Rd. Intersection	1245	155	18	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
19 300m S of Spar and Spar Ext Intersection near overpass	1300	155	20	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 90m SW of Spar and Lingan Rd. Intersection	1300	155	19	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
21 90m SW of Spar and Lingan Rd. Intersection	1345	155	18	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
22 300m S of Spar and Spar Ext Intersection near overpass	1400	155	22	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 90m SW of Spar and Lingan Rd. Intersection	1400	155	19	Southwest	Downwind	No activity observed on site	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 90m SW of Spar and Lingan Rd. Intersection	1445	155	19	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
25 300m S of Spar and Spar Ext Intersection near overpass	1500	155	23	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 90m SW of Spar and Lingan Rd. Intersection	1500	155	19	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 ($\mu\text{g}/\text{m}^3$)
90m SW of Spar and Lingan Rd. Intersection	0700 to 0759	15	990
90m SW of Spar and Lingan Rd. Intersection	0800 to 0859	32	990
90m SW of Spar and Lingan Rd. Intersection	0900 to 0959	53	990
90m SW of Spar and Lingan Rd. Intersection	1000 to 1059	76	990
90m SW of Spar and Lingan Rd. Intersection	1100 to 1159	98	990
90m SW of Spar and Lingan Rd. Intersection	1200 to 1259	117	990
90m SW of Spar and Lingan Rd. Intersection	1300 to 1359	136	990
90m SW of Spar and Lingan Rd. Intersection	1400 to 1459	155	990
90m SW of Spar and Lingan Rd. Intersection	1500 to 1559	174	990

VOC Monitoring

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