

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1313-22
FROM	Dianne Theriault	SHIFT:	0630 to 1800
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	22 nd May, 2009	STPA NO.	TP6D-CO-0060

**SUBJECT: 21st May, 2009, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Access Roads, Coke Ovens
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 21st May, 2009. Jennifer Andrews and Dwayne Timmons 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 20°C
- Wind Direction: South to Southwest

Comments: *ALL-TECH was on-Site at 0630 hours and sampling began as soon as there was site activity. Air monitoring was performed during AECOM'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 – Access Roads, Coke Ovens
21st May, 2009

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 30m East of Salvation Army on Victoria Rd.	0700	155	9	South	Upwind	Background	No observations seen to affect sampling integrity
2 30m East of TP6D (CO) main gate	0700	155	10	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 30m East of TP6D (CO) main gate	0740	155	11	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 30m East of Salvation Army on Victoria Rd.	0800	155	9	South	Upwind	Background	No observations seen to affect sampling integrity
5 30m East of TP6D (CO) main gate	0800	155	10	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 30m East of TP6D (CO) main gate	0830	155	9	South	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
7 30m East of Salvation Army on Victoria Rd.	0900	155	9	South	Upwind	Background	No observations seen to affect sampling integrity
8 30m East of TP6D (CO) main gate	0900	155	10	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 30m East of TP6D (CO) main gate	0915	155	11	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
10 30m East of Salvation Army on Victoria Rd.	1000	155	12	South	Upwind	Background	No observations seen to affect sampling integrity
11 30m East of TP6D (CO) main gate	1000	155	13	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
12 30m East of TP6D (CO) main gate	1020	155	14	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
13 30m East of Salvation Army on Victoria Rd.	1100	155	14	South	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 30m East of TP6D (CO) main gate	1100	155	15	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 30m East of TP6D (CO) main gate	1135	155	13	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 10m East of Victoria Rd. and Cape Breton St. intersection	1200	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 50m East of TP6D (CO) main gate	1200	155	11	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
18 50m East of TP6D (CO) main gate	1220	20155	11	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
19 10m East of Victoria Rd. and Cape Breton St. intersection	1300	155	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 50m East of TP6D (CO) main gate	1300	155	8	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
21 50m East of TP6D (CO) main gate	1315	155	10	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
22 10m East of Victoria Rd. and Cape Breton St. intersection	1400	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 50m East of TP6D (CO) main gate	1400	155	14	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
24 50m East of TP6D (CO) main gate	1445	155	16	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
25 10m East of Victoria Rd. and Cape Breton St. intersection	1500	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 50m East of TP6D (CO) main gate	1500	155	17	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
27 50m East of TP6D (CO) main gate	1525	155	14	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
28 10m East of Victoria Rd. and Cape Breton St. intersection	1600	155	23	Southwest	Upwind	Background	No observations seen to affect sampling integrity
29 50m East of TP6D (CO) main gate	1600	155	15	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
30 50m East of TP6D (CO) main gate	1635	155	16	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
31 10m East of Victoria Rd. and Cape Breton St. intersection	1700	155	24	Southwest	Upwind	Background	No observations seen to affect sampling integrity
32 50m East of TP6D (CO) main gate	1700	155	19	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
33 50m East of TP6D (CO) main gate	1715	155	17	Southwest	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 ($\mu\text{g}/\text{m}^3$)
30m East of TP6D (CO) main gate	0700 to 0759	11	990
30m East of TP6D (CO) main gate	0800 to 0859	21	990
30m East of TP6D (CO) main gate	0900 to 0959	32	990
30m East of TP6D (CO) main gate	1000 to 1059	46	990
30m East of TP6D (CO) main gate	1100 to 1159	60	990
50m East of TP6D (CO) main gate	1200 to 1259	71	990
50m East of TP6D (CO) main gate	1300 to 1359	80	990
50m East of TP6D (CO) main gate y	1400 to 1459	95	990
50m East of TP6D (CO) main gate	1500 to 1559	111	990
50m East of TP6D (CO) main gate	1600 to 1659	127	990
50m East of TP6D (CO) main gate	1700 to 1759	145	990

VOC Monitoring

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