

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1313-10
FROM	Dianne Theriault	SHIFT:	0630 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
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DATE	8 th May, 2009	STPA NO.	TP6D-CO-0048

**SUBJECT: 7th 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 7th of May, 2009. Jennifer Andrews and Keith Neville of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly cloudy, rain
- Temperature: approximately 8°C
- Wind Direction: West

Comments: *ALL-TECH was on-Site at 0630 hours and sampling began as soon as there was site activity, but was later put on standby at 1530 hours and cancelled for the day at 1730 due to ongoing precipitation. 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 Keith Neville 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
7th May, 2009

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
1 Curry's Lane, 100m West of Lingan Rd.	0700	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
2 4m Southwest of Coke Ovens Brook main gate	0700	155	2	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
3 4m Southwest of Coke Ovens Brook main gate	0725	155	2	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
4 Curry's Lane, 100m West of Lingan Rd.	0800	155	2	West	Upwind	Background	No observations seen to affect sampling integrity
5 4m Southwest of Coke Ovens Brook main gate	0800	155	3	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
6 4m Southwest of Coke Ovens Brook main gate	0830	155	4	West	Downwind	Activity not visible from sample location	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 Curry's Lane, 100m West of Lingan Rd.	0900	155	3	West	Upwind	Background	No observations seen to affect sampling integrity
8 4m Southwest of Coke Ovens Brook main gate	0900	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
9 4m Southwest of Coke Ovens Brook main gate	0940	155	3	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
10 Curry's Lane, 100m West of Lingan Rd.	1000	155	2	West	Upwind	Background	No observations seen to affect sampling integrity
11 4m Southwest of Coke Ovens Brook main gate	1000	155	3	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
12 4m Southwest of Coke Ovens Brook main gate	1015	155	2	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
13 Curry's Lane, 100m West of Lingan Rd.	1100	155	3	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
14 4m Southwest of Coke Ovens Brook main gate	1100	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
15 4m Southwest of Coke Ovens Brook main gate	1120	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
16 Curry's Lane, 100m West of Lingan Rd.	1200	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
17 4m Southwest of Coke Ovens Brook main gate	1200	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
18 4m Southwest of Coke Ovens Brook main gate	1215	155	6	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
19 Curry's Lane, 100m West of Lingan Rd.	1300	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
20 4m Southwest of Coke Ovens Brook main gate	1300	155	4	West	Downwind	Activity not visible from sample location	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 4m Southwest of Coke Ovens Brook main gate	1325	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
22 Curry's Lane, 100m West of Lingan Rd.	1400	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
23 4m Southwest of Coke Ovens Brook main gate	1400	155	6	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
24 4m Southwest of Coke Ovens Brook main gate	1430	155	5	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
25 Curry's Lane, 100m West of Lingan Rd.	1500	155	8	West	Upwind	Background	No observations seen to affect sampling integrity
26 4m Southwest of Coke Ovens Brook main gate	1500	155	6	West	Downwind	Activity not visible from sample location	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 ($\mu\text{g}/\text{m}^3$)
4m Southwest of Coke Ovens Brook main gate	0700 to 0759	2	990
4m Southwest of Coke Ovens Brook main gate	0800 to 0859	6	990
4m Southwest of Coke Ovens Brook main gate	0900 to 0959	10	990
4m Southwest of Coke Ovens Brook main gate	1000 to 1059	13	990
4m Southwest of Coke Ovens Brook main gate	1100 to 1159	17	990
4m Southwest of Coke Ovens Brook main gate	1200 to 1259	22	990
4m Southwest of Coke Ovens Brook main gate	1300 to 1359	26	990
4m Southwest of Coke Ovens Brook main gate	1400 to 1459	32	990
4m Southwest of Coke Ovens Brook main gate	1500 to 1559	38	990

VOC Monitoring

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