

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-29
FROM	Dianne Theriault	SHIFT:	0630 to 1830
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	26 th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	TP6D-NP-0103

**SUBJECT: 25th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Access Roads, North Pond
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 25th of June, 2009. Jennifer Andrews and Nigel MacLean 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 26°C
- Wind Direction: 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 180 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, North Pond
25th June, 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 40m Northwest of railway maintenance building (N46°08.958' W060°11.821')	0700	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 140m North of TP2 main gate (N46°09.017' W060°11.393')	0700	180	6	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 140m North of TP2 main gate (N46°09.017' W060°11.393')	0730	180	2	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
4 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	0800	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 140m North of TP2 main gate (N46°09.017' W060°11.393')	0800	180	2	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
6 140m North of TP2 main gate (N46°09.017' W060°11.393')	0845	180	4	Southwest	Downwind	Trucks, roller and bobcat 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 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	0900	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 140m North of TP2 main gate (N46°09.017' W060°11.393')	0900	180	2	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
9 140m North of TP2 main gate (N46°09.017' W060°11.393')	0930	180	3	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
10 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1000	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 140m North of TP2 main gate (N46°09.017' W060°11.393')	1000	180	6	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
12 140m North of TP2 main gate (N46°09.017' W060°11.393')	1035	180	5	Southwest	Downwind	Trucks, roller and bobcat 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
13 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1100	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 140m North of TP2 main gate (N46°09.017' W060°11.393')	1100	180	7	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
15 140m North of TP2 main gate (N46°09.017' W060°11.393')	1140	180	17	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
16 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1200	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 140m North of TP2 main gate (N46°09.017' W060°11.393')	1200	180	12	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
18 140m North of TP2 main gate (N46°09.017' W060°11.393')	1245	180	13	Southwest	Downwind	Trucks, roller and bobcat 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
19 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1300	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 140m North of TP2 main gate (N46°09.017' W060°11.393')	1300	180	14	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
21 140m North of TP2 main gate (N46°09.017' W060°11.393')	1320	180	14	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
22 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1400	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 140m North of TP2 main gate (N46°09.017' W060°11.393')	1400	180	15	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
24 140m North of TP2 main gate (N46°09.017' W060°11.393')	1435	180	15	Southwest	Downwind	Trucks, roller and bobcat 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
25 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1500	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 140m North of TP2 main gate (N46°09.017' W060°11.393')	1500	180	14	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
27 140m North of TP2 main gate (N46°09.017' W060°11.393')	1540	180	15	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
28 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1600	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
29 140m North of TP2 main gate (N46°09.017' W060°11.393')	1600	180	16	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
30 140m North of TP2 main gate (N46°09.017' W060°11.393')	1615	180	16	Southwest	Downwind	Trucks dumping material	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
31 120m Northwest of Railway Rd. and Ferry St. intersection (N46°08.961' W060°11.819')	1700	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
32 140m North of TP2 main gate (N46°09.017' W060°11.393')	1700	180	13	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
33 140m North of TP2 main gate (N46°09.017' W060°11.393')	1745	180	12	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.

Summary of Downwind PM₁₀ Action Levels

Average PM ₁₀ Concentration (µg/m ³)	Averaging Period (Hours)	Downwind Action Level (µg/m ³)
4	1	125
4	4	85
9	8	70

VOC Monitoring

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