

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-31
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	29 th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	TP6D-NP-0105

**SUBJECT: 26th 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 26th 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: *Air monitoring was delayed until 0730 hours due to high humidity, and began at 0930 hours when weather conditions were within instrument specifications. 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
26th 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 20m North of railway maintenance building (N46°08.845' W060°11.629')	0930	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 205 m North of TP2 main gate (N46°09.043' W060°11.426')	0930	180	7	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
3 205 m North of TP2 main gate (N46°09.043' W060°11.426')	0945	180	9	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
4 20m North of railway maintenance building (N46°08.845' W060°11.629')	1000	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1000	180	11	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
6 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1020	180	14	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
7 20m North of railway maintenance building (N46°08.845' W060°11.629')	1100	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1100	180	10	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
9 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1125	180	11	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
10 20m North of railway maintenance building (N46°08.845' W060°11.629')	1200	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1215	180	11	Southwest	Downwind	No activity observed on site	Late sample due to equipment malfunction

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
12 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1230	180	12	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
13 20m North of railway maintenance building (N46°08.845' W060°11.629')	1300	180	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1300	180	13	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
15 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1320	180	12	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
16 20m North of railway maintenance building (N46°08.845' W060°11.629')	1400	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1400	180	12	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
18 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1440	180	13	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
19 20m North of railway maintenance building (N46°08.845' W060°11.629')	1500	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1500	180	11	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
21 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1545	180	14	Southwest	Downwind	Trucks, roller and bobcat in operation	No observations seen to affect sampling integrity
22 20m North of railway maintenance building (N46°08.845' W060°11.629')	1600	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1600	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
24 205 m North of TP2 main gate (N46°09.043' W060°11.426')	1615	180	13	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)
8	1	125
11	4	85
12	8	70

VOC Monitoring

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