

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-33
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
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DATE	29 th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	TP6D-CP-0107

**SUBJECT: 26th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Access Roads, Cooling Pond
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 26th of June, 2009. Donald MacIsaac 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 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 Donald MacIsaac 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, Cooling 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 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	0930	180	10	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
2 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	0945	180	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
3 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	0945	180	17	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
4 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	1000	180	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1000	180	10	Southwest	Downwind	Excavator operating	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 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1020	180	7	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
7 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	1100	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1100	180	30	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
9 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1135	180	56	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
10 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	1200	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1200	180	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
12 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1240	180	66	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
13 40m Northeast of old train station (N 46°08.487' W 060°11.373')	1300	180	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1300	180	26	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
15 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1325	180	44	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
16 40m Northeast of old train station (N 46°08.487' W 060°11.373')	1400	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1400	180	60	Southwest	Downwind	Excavator, dump trucks operating	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 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1445	180	81	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
19 40m Northeast of old train station (N 46°08.487' W 060°11.373')	1500	180	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1500	180	65	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
21 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1540	180	67	Southwest	Downwind	Excavator, dump trucks operating	No observations seen to affect sampling integrity
22 40m Northeast of old train station (N 46°08.487' W 060°11.373')	1600	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1600	180	43	Southwest	Downwind	Excavator, roller operating	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 8m Northwest of Cape Breton St., Inglis St. intersection (N 46°08.663' W 060°11.002')	1645	180	7	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)
14	1	125
26	4	85
38	8	70

VOC Monitoring

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