

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-30
FROM	Dianne Theriault	SHIFT:	0930 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-CP-0104

**SUBJECT: 25th 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 25th of June, 2009. Donald MacIsaac and Tyler Rowe 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 0930 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 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
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 30m East of Dodd St., Pitt St. intersection (N 46°08.412' W 060°11.354')	1000	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1000	180	7	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1045	180	10	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
4 110m South of Intercolonial St. fixed station (N 46°08.493' W 060°10.376')	1100	180	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1100	180	10	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
6 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1120	180	10	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
7 110m South of Intercolonial St. fixed station (N 46°08.493' W 060°10.376')	1200	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1200	180	9	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1225	180	8	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
10 110m South of Intercolonial St. fixed station (N 46°08.493' W 060°10.376')	1300	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1300	180	9	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
12 25m Northwest of Inglis St., Cape Breton St. Intersection (N 46°08.671' W 060°11.004')	1345	180	13	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
13 110m South of Intercolonial St. fixed station (N 46°08.493' W 060°10.376')	1400	180	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 25m Northwest of Inglis St., Cape Breton St. Intersection (N 46°08.671' W 060°11.004')	1400	180	10	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
15 25m Northwest of Inglis St., Cape Breton St. Intersection (N 46°08.671' W 060°11.004')	1420	180	8	Southwest	Downwind	Excavator, grader operating	No observations seen to affect sampling integrity
16 110m South of Intercolonial St. fixed station (N 46°08.493' W 060°10.376')	1500	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 25m Northwest of Inglis St., Cape Breton St. Intersection (N 46°08.671' W 060°11.004')	1500	180	8	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
18 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1545	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
19 30m East of Dodd St. and Pitt St. intersection (N46°08.412' W060°11.354')	1600	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1600	180	14	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
21 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1615	180	24	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
22 30m East of Dodd St. and Pitt St. intersection (N46°08.412' W060°11.354')	1700	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1700	180	11	Southwest	Downwind	Roller operating	No observations seen to affect sampling integrity
24 140m Northwest of STPA building (N 46°08.780' W 060°11.069')	1740	180	9	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)
9	1	125
10	4	85
11	8	70

VOC Monitoring

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