

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1313-02
FROM	Dianne Theriault	SHIFT:	0630 to 1530
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	4 th May, 2009	STPA NO.	TP6D-NP-0040

**SUBJECT: 1st May, 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 1st of May, 2009. Shaun Dove 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 cloudy, rain
- Temperature: approximately 13°C
- Wind Direction: South

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 1330 hours and cancelled for the day at 1530 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 Dwayne Timmons 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:

Shawn Bernon shawn@tarpondscleanup.ca, Wilfred Kaiser wilfred@tarpondscleanup.ca, Nancy LeDrew nancy@tarpondscleanup.ca, Trish Magliaro trish@tarpondscleanup.ca, Terry Smith tsmith@toalltech.com, Phyllis Low pilow@toalltech.com, Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@croworld.com, Darren Lawless dlawless@toalltech.com, Kevin Mac Pherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Access Roads, North Pond
1st May, 2009

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 60m Northeast of Intercolonial St. and Dorchester St. intersection	0700	155	16	South	Upwind	Background	No observations seen to affect sampling integrity
2 300m North of North Pond main gate	0700	155	26	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
3 300m North of North Pond main gate	0720	155	19	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
4 60m Northeast of Intercolonial St. and Dorchester St. intersection	0800	155	20	South	Upwind	Background	No observations seen to affect sampling integrity
5 300m North of North Pond main gate	0800	155	28	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
6 300m North of North Pond main gate	0830	155	41	South	Downwind	Machines moving 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 60m Northeast of Intercolonial St. and Dorchester St. intersection	0900	155	17	South	Upwind	Background	No observations seen to affect sampling integrity
8 300m North of North Pond main gate	0900	155	17	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
9 300m North of North Pond main gate	0915	155	28	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
10 60m Northeast of Intercolonial St. and Dorchester St. intersection	1000	155	18	South	Upwind	Background	No observations seen to affect sampling integrity
11 300m North of North Pond main gate	1000	155	22	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity
12 300m North of North Pond main gate	1030	155	46	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
13 60m Northeast of Intercolonial St. and Dorchester St. intersection	1100	155	19	South	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 300m North of the North Pond main gate	1100	155	42	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
15 300m North of the North Pond main gate	1145	155	54	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
16 60m Northeast of Intercolonial St. and Dorchester St. intersection	1200	155	38	South	Upwind	Background	No observations seen to affect sampling integrity
17 300m North of the North Pond main gate	1200	155	22	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
18 300m North of the North Pond main gate	1220	155	29	South	Downwind	Machines moving material	No observations seen to affect sampling integrity
19 60m Northeast of Intercolonial St. and Dorchester St. intersection	1300	155	19	South	Upwind	Background	No observations seen to affect sampling integrity
20 300m North of the North Pond main gate	1300	155	32	South	Downwind	No activity observed on site	No observations seen to affect sampling integrity

Comparison of Downwind Daily Results for Dust Budget

Location	Duration	Dust Budget Value ($\mu\text{g}/\text{m}^3$)	Dust Budget Exceedance Value ($\mu\text{g}/\text{m}^3$)
300m North of North Pond main gate	0700 to 0759	23	990
300m North of North Pond main gate	0800 to 0859	58	990
300m North of North Pond main gate	0900 to 0959	81	990
300m North of North Pond main gate	1000 to 1059	115	990
300m North of North Pond main gate	1100 to 1159	163	990
300m North of North Pond main gate	1200 to 1259	189	990
300m North of North Pond main gate	1300 to 1359	221	990

VOC Monitoring

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