ALL-TECH
ENVIRONMENTAL SERVICES CAPE BRETON LTD

1 Inglis Street, Suite 101, P O Box 586
Sydney, Nova Scotia, B1P 6H4
www.toalltech.com

Tel. 902-539-3012
Fax: 902-539-3381
email@toalltech.com

MEMORANDUM

TO	Dawn MacNeil, STPA	**FILE NO.**	S-1331-27
FROM	Dianne Theriault	**SHIFT:**	0700 to 1830
TEL	(902) 539-3012	**CC:**	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	25th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	**TP6D-NP-0101**

SUBJECT: 24th 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 PM_{10}) results for air monitoring performed on the 24th of June, 2009. Jennifer Andrews and Britney Grant of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:
- Cloudy with showers and sunny periods
- Temperature: approximately 22°C
- Wind Direction: Southwest

Comments: *Air monitoring was delayed until 0900 hours due to high humidity, and began when weather conditions were within instrument specifications. Air monitoring was later put on standby at 1045 hours due to precipitation, and resumed at 1400 hours when weather conditions were within instrument specifications. Air monitoring was performed during AECOM`s construction activities.*

All downwind and upwind measurements of PM_{10} were below the established Site Action Level for this parameter of 180 µg/m^3.

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:
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 pjlow@toalltech.com,Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@craworld.com,Darren Lawless dlawless@toalltech.com ,Kevin Mac Pherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM_{10} Concentration Results
Sydney Tar Ponds Agency – Access Roads, North Pond
24th June, 2009

Sample No. & Air Monitoring Location	Time of Day	PM_{10} Action Level ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 20m North of railway maintenance building (N46°08.962´ W060°11.818´)	0900	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 80m South of new truck scale (N46°09.258´ W060°11.634´)	0925	180	9	Southwest	Downwind	Bobcat and roller in operation	No observations seen to affect sampling integrity
3 80m South of new truck scale (N46°09.258´ W060°11.634´)	0945	180	13	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
4 20m North of railway maintenance building (N46°08.962´ W060°11.818´)	1000	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 80m South of new truck scale (N46°09.258´ W060°11.634´)	1000	180	8	Southwest	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
6 80m South of new truck scale (N46°09.258´ W060°11.634´)	1030	180	8	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM_{10} Action Level ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
7 40m Northwest of railway maintenance building (N46°08.942′ W060°11.749′)	1400	180	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 40m Northwest of railway maintenance building (N46°08.942′ W060°11.749′)	1500	180	13	Southwest	Upwind	Background	No observations seen to affect sampling integrity
9 80m South of new truck scale (N46°09.258′ W060°11.634′)	1500	180	16	Southwest	Downwind	Roller and grader in operation	No observations seen to affect sampling integrity
10 80m South of new truck scale (N46°09.258′ W060°11.634′)	1540	180	21	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
11 40m Northwest of railway maintenance building (N46°08.942′ W060°11.749′)	1600	180	22	Southwest	Upwind	Background	No observations seen to affect sampling integrity
12 80m South of new truck scale (N46°09.258′ W060°11.634′)	1600	180	11	Southwest	Downwind	Roller in operation	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM_{10} Action Level ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
13 80m South of new truck scale (N46°09.258´ W060°11.634´)	1640	180	6	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
14 40m Northwest of railway maintenance building (N46°08.942´ W060°11.749´)	1700	180	12	Southwest	Upwind	Background	No observations seen to affect sampling integrity
15 80m South of new truck scale (N46°09.258´ W060°11.634´)	1700	180	5	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
16 80m South of new truck scale (N46°09.258´ W060°11.634´)	1745	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 PM_{10} Action Levels

Average PM_{10} Concentration ($\mu g/m^3$)	Averaging Period (Hours)	Downwind Action Level ($\mu g/m^3$)
11	1	125
21	4	85
25	8	70

VOC Monitoring

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