

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1348-01
FROM	Dianne Theriault	SHIFT:	0700 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	25 th June, 2009	STPA NO.	CO6 - 0001

**SUBJECT: 24th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Surface Cap
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 24th of June, 2009. Trevor Rowe and Keith Neville 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 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 Trevor Rowe 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 – Surface Cap
24th June, 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 150m East of coke ovens security gate on Teak St. (N 45° 58.008' W 060° 12.305')	0900	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	0900	180	7	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
3 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	0920	180	3	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
4 130m East of coke ovens security gate on Teak St. (N 46° 08.909' W 060° 10.002')	1000	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1000	180	3	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
6 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1025	180	3	Southwest	Downwind	Excavator 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
7 130m East of coke ovens security gate on Teak St. (N 46° 08.909' W 060° 10.002')	1400	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1400	180	7	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
9 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1440	180	2	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
10 130m East of coke ovens security gate on Teak St. (N 46° 08.909' W 060° 10.002')	1500	180	12	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1500	180	2	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
12 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1515	180	2	Southwest	Downwind	Excavator 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
13 130m East of coke ovens security gate on Teak St. (N 46° 08.909' W 060° 10.002')	1600	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1600	180	2	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
15 50m Southeast of Metro Sanitation (N 46° 09.147' W 060° 09.820')	1625	180	1	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)
5	1	125
19	4	85
15	8	70

VOC Monitoring

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