

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Dianne Theriault
TEL (902) 539-3012
FAX (902) 539-3381
DATE 6th July, 2009

FILE NO. S-1351-01
SHIFT: 0900 to 1700
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH
STPA NO. TP2-0186

**SUBJECT: 3rd July, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Material Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 3rd of July, 2009. Colin MacIsaac and Shaun Dove of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:
- Mainly cloudy
- Temperature: approximately 19°C
- Wind Direction: Southeast

Comments: *Air monitoring was delayed until 0900 hours due to high humidity, and began at 1100 hours when weather was 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 Colin 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:

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 – Material Processing Facility
3rd July, 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 15m Southwest of Ferry Street, Inglis Street intersection (N 46° 08.697' W 060° 11.503')	1100	180	22	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 120m Northeast of Railway building (N 46° 08.958' W 060° 11.706')	1100	180	14	Southeast	Downwind	Excavators moving material	No observations seen to affect sampling integrity
3 120m Northeast of Railway building (N 46° 08.958' W 060° 11.706')	1130	180	15	Southeast	Downwind	Excavators moving material	No observations seen to affect sampling integrity
4 15m Southwest of Ferry Street, Inglis Street intersection (N 46° 08.697' W 060° 11.503')	1200	180	25	Southeast	Upwind	Background	No observations seen to affect sampling integrity
5 120m Northeast of Railway building (N 46° 08.958' W 060° 11.706')	1200	180	18	Southeast	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
6 120m Northeast of Railway building (N 46° 08.958' W 060° 11.706')	1215	180	20	Southeast	Downwind	No activity observed on site	No observations seen to affect sampling integrity
7 50m Northeast of Acadian Lines terminal (N 46° 08.543' W 060° 11.146')	1300	180	25	Southeast	Upwind	Background	No observations seen to affect sampling integrity
8 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1300	180	24	Southeast	Downwind	Excavators moving material	No observations seen to affect sampling integrity
9 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1330	180	25	Southeast	Downwind	Excavators moving material	No observations seen to affect sampling integrity
10 50m Northeast of Acadian Lines terminal (N 46° 08.543' W 060° 11.146')	1400	180	23	Southeast	Upwind	Background	No observations seen to affect sampling integrity
11 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1400	180	23	Southeast	Downwind	Dozer 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
12 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1415	180	23	Southeast	Downwind	Dozer moving material	No observations seen to affect sampling integrity
13 50m Northeast of Acadian Lines terminal (N 46° 08.543' W 060° 11.146')	1500	180	22	Southeast	Upwind	Background	No observations seen to affect sampling integrity
14 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1500	180	23	Southeast	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1525	180	22	Southeast	Downwind	Dozer moving material	No observations seen to affect sampling integrity
16 50m Northeast of Acadian Lines terminal (N 46° 08.543' W 060° 11.146')	1600	180	21	Southeast	Upwind	Background	No observations seen to affect sampling integrity
17 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1600	180	39	Southeast	Downwind	Dozer 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
18 90m Northwest of TP2 main entrance (N 46° 08.992' W 060° 11.372')	1615	180	24	Southeast	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)
15	1	125
21	4	85

VOC Monitoring

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