

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1329-17
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	29 th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	TP2-0185

**SUBJECT: 26th June, 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 26th of June, 2009. Shaun Dove and Alison Giovannetti 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: *Air monitoring was delayed until 0730 hours due to high humidity, and began at 0930 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 Alison Giovannetti 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 – Material Processing Facility
26th 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 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	0930	180	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	0930	180	12	Southwest	Downwind	Excavator and zoom boom operating	No observations seen to affect sampling integrity
3 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	0945	180	10	Southwest	Downwind	Excavator and zoom boom operating	No observations seen to affect sampling integrity
4 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1000	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1000	180	10	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
6 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1015	180	10	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
7 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1100	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1100	180	10	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1115	180	8	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
10 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1200	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1200	180	16	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
12 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1235	180	7	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
13 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1300	180	2	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1300	180	8	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
15 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1345	180	7	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
16 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1400	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1400	180	7	Southwest	Downwind	Excavator 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 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1440	180	8	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
19 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1500	180	3	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1500	180	10	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
21 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1535	180	7	Southwest	Downwind	Zoom boom operating	No observations seen to affect sampling integrity
22 85m South of Ferry St. and Railway Rd. intersection (N 46° 08.675' W 060° 11.470')	1600	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1600	180	7	Southwest	Downwind	Zoom boom operating	No observations seen to affect sampling integrity

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
24 30m Southeast of TP2 main entrance (N 46° 08.956' W 060° 11.247')	1615	180	8	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)
11	1	125
11	4	85
9	8	70

VOC Monitoring

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