

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1329-12
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	18 th June, 2009	STPA NO.	TP2-0180

**SUBJECT: 17th 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 17th 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 21°C
- Wind Direction: Southwest to West to Southwest to South

Comments: *ALL-TECH was on-Site at 0730 hours and sampling began as soon as there was site activity. 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 8 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
17th 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 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	0800	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	0800	180	8	Southwest	Downwind	Cement trucks operating	No observations seen to affect sampling integrity
3 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	0830	180	15	Southwest	Downwind	Excavator, cement trucks and zoom boom operating	No observations seen to affect sampling integrity
4 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	0900	180	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	0900	180	9	Southwest	Downwind	Excavator, cement trucks and zoom boom operating	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 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	0920	180	11	Southwest	Downwind	Excavator, cement trucks and zoom boom operating	No observations seen to affect sampling integrity
7 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	1000	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1000	180	10	Southwest	Downwind	Cement trucks operating	No observations seen to affect sampling integrity
9 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1025	180	16	Southwest	Downwind	Cement trucks operating	No observations seen to affect sampling integrity
10 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	1100	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1100	180	9	Southwest	Downwind	Excavator moving material, cement trucks operating	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 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1140	180	35	Southwest	Downwind	Excavator moving material, cement trucks operating	No observations seen to affect sampling integrity
13 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	1200	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1200	180	11	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1220	180	21	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 175m North of Ferry St. and Railway Rd. intersection (N 46° 08.763' W 060° 11.581')	1300	180	6	West	Upwind	Background	No observations seen to affect sampling integrity
17 80m Southeast of TP2 main entrance (N 46° 08.947' W 060° 11.243')	1300	180	12	West	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 80m Southeast of TP2 main entrance (N 46° 08.947' W 060° 11.243')	1325	180	18	West	Downwind	Excavator moving material	No observations seen to affect sampling integrity
19 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	1400	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1400	180	15	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
21 40m Southeast of TP2 main entrance (N 46° 08.883' W 060° 11.667')	1425	180	45	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
22 60m South of Ferry St. and Railway Rd. intersection (N 46° 08.678' W 060° 11.477')	1500	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 60m Northwest of TP2 main entrance (N 46° 09.006' W 060° 11.382')	1500	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
24 60m Northwest of TP2 main entrance (N 46° 09.006' W 060° 11.382')	1520	180	21	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
25 30m Northwest of Inglis St. and Terminal Rd. intersection (N 46° 08.556' W 060° 11.040')	1600	180	6	South	Upwind	Background	No observations seen to affect sampling integrity
26 60m Northwest of TP2 main entrance (N 46° 09.006' W 060° 11.382')	1600	180	30	South	Downwind	Excavator moving material	No observations seen to affect sampling integrity
27 60m Northwest of TP2 main entrance (N 46° 09.006' W 060° 11.382')	1640	180	22	South	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)
12	1	125
14	4	85
17	8	70

VOC Monitoring

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