

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1351-03
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
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DATE	8 th July, 2009	STPA NO.	TP2-0188

**SUBJECT: 7th 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 7th of July, 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 17°C
- Wind Direction: Northeast to North

Comments: *Air monitoring was delayed until 0730 hours due to precipitation and began at 0900 hours when weather conditions were within instrumentation 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
7th July, 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 275m North of Inglis St. and Spar Rd. intersection (N 46° 08.973' W 060° 11.291')	0900	180	3	Northeast	Upwind	Background	No observations seen to affect sampling integrity
2 150m West of Ferry St. bridge (N 46° 08.750' W 060° 11.511')	0900	180	3	Northeast	Downwind	Worker activity	No observations seen to affect sampling integrity
3 150m West of Ferry St. bridge (N 46° 08.750' W 060° 11.511')	0925	180	4	Northeast	Downwind	Zoom boom operating	No observations seen to affect sampling integrity
4 275m North of Inglis St. and Spar Rd. intersection (N 46° 08.973' W 060° 11.291')	1000	180	2	Northeast	Upwind	Background	No observations seen to affect sampling integrity
5 150m West of Ferry St. bridge (N 46° 08.750' W 060° 11.511')	1000	180	2	Northeast	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 150m West of Ferry St. bridge (N 46° 08.750' W 060° 11.511')	1020	180	2	Northeast	Downwind	Zoom boom operating	No observations seen to affect sampling integrity
7 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1100	180	4	North	Upwind	Background	No observations seen to affect sampling integrity
8 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1100	180	6	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
9 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1125	180	6	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
10 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1200	180	5	North	Upwind	Background	No observations seen to affect sampling integrity
11 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1200	180	5	North	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 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1225	180	6	North	Downwind	No activity observed on site	No observations seen to affect sampling integrity
13 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1300	180	4	North	Upwind	Background	No observations seen to affect sampling integrity
14 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1300	180	4	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
15 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1330	180	4	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
16 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1400	180	5	North	Upwind	Background	No observations seen to affect sampling integrity
17 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1400	180	5	North	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 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1415	180	6	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
19 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1500	180	5	North	Upwind	Background	No observations seen to affect sampling integrity
20 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1500	180	7	North	Downwind	No activity observed on site	No observations seen to affect sampling integrity
21 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1515	180	5	North	Downwind	Excavator moving material	No observations seen to affect sampling integrity
22 200m North of TP2 main entrance (N 46° 09.016' W 060° 11.372')	1600	180	7	North	Upwind	Background	No observations seen to affect sampling integrity
23 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1600	180	5	North	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
24 40m North of Acadian Lines bus terminal (N 46° 08.521' W 060° 11.165')	1640	180	7	North	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)
4	1	125
5	4	85
5	8	70

VOC Monitoring

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