

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-25
FROM	Dianne Theriault	SHIFT:	0630 to 1800
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
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DATE	22 nd June, 2009	STPA NO.	TP6D-NP-0099

**SUBJECT: 19th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Access Roads, North Pond
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 19th of June, 2009. Jennifer Andrews and Britney Grant of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly overcast
- Temperature: approximately 25°C
- Wind Direction: West to Southwest

Comments: *ALL-TECH was on-Site at 0630 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 Jennifer Andrews 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 – Access Roads, North Pond
19th June, 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 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	0700	180	7	West	Upwind	Background	No observations seen to affect sampling integrity
2 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0700	180	15	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0730	180	24	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
4 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	0800	180	8	West	Upwind	Background	No observations seen to affect sampling integrity
5 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0800	180	24	West	Downwind	Trucks dumping 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
6 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0845	180	18	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
7 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	0900	180	8	West	Upwind	Background	No observations seen to affect sampling integrity
8 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0900	180	38	West	Downwind	Trucks dumping material	No observations seen to affect sampling integrity
9 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	0925	180	13	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
10 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1000	180	9	West	Upwind	Background	No observations seen to affect sampling integrity
11 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1000	180	12	West	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 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1040	180	13	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
13 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1100	180	10	West	Upwind	Background	No observations seen to affect sampling integrity
14 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1100	180	11	West	Downwind	Truck, roller and bobcat in operation	No observations seen to affect sampling integrity
15 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1120	180	11	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
16 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1200	180	10	West	Upwind	Background	No observations seen to affect sampling integrity
17 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1200	180	12	West	Downwind	Trucks dumping 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 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1215	180	20	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
19 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1300	180	10	West	Upwind	Background	No observations seen to affect sampling integrity
20 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1300	180	24	West	Downwind	Roller and bobcat in operation	No observations seen to affect sampling integrity
21 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1330	180	21	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
22 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1400	180	11	West	Upwind	Background	No observations seen to affect sampling integrity
23 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1400	180	48	West	Downwind	Bobcat 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
24 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1440	180	72	West	Downwind	Activity not visible from monitoring location	Site road truck traffic
25 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1500	180	11	West	Upwind	Background	No observations seen to affect sampling integrity
26 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1500	180	33	West	Downwind	Truck dumping material	No observations seen to affect sampling integrity
27 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1545	180	101	West	Downwind	Activity not visible from monitoring location	Site road truck traffic
28 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1600	180	12	West	Upwind	Background	No observations seen to affect sampling integrity
29 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1600	180	38	West	Downwind	Trucks dumping 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
30 200m Northwest of TP2 main entrance (N46°09.034' W060°11.434')	1620	180	33	West	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
31 50m Northwest of railway maintenance building (N46°08.965' W060°11.823')	1700	180	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
32 80m Southeast of new truck scale (N46°08.929' W060°11.333')	1700	180	16	Southwest	Downwind	Truck dumping material	No observations seen to affect sampling integrity
33 80m Southeast of new truck scale (N46°08.929' W060°11.333')	1715	180	15	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)
20	1	125
20	4	85
23	8	70

VOC Monitoring

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