

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1331-18
FROM	Dianne Theriault	SHIFT:	0730 to 1830
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	16 th June, 2009	STPA NO.	TP6D-NP-0092

**SUBJECT: 15th 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 15th of June, 2009. Jennifer Andrews, Jeff King, Donald MacIsaac and Tyler Rowe 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 20°C
- Wind Direction: Southeast 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 155 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 Donald 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:

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Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Access Roads, North Pond
15th 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 150m Northwest of Ferry St., Inglis St. intersection (N 46°08.947' W 060°11.248')	0800	155	6	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 120m Northeast of railway building (N 46°08.961' W 060°11.854')	0800	155	7	Southeast	Downwind	Dump trucks, dozer operating	No observations seen to affect sampling integrity
3 120m Northeast of railway building (N 46°08.961' W 060°11.854')	0820	155	9	Southeast	Downwind	Dump trucks, dozer operating	No observations seen to affect sampling integrity
4 Railway property, 300m North of Ferry St. (N 46°08.874' W 060°11.663')	0900	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 50m South of new truck scale (N 46°09.279' W 060°11.639')	0910	155	16	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
6 50m South of new truck scale (N 46°09.279' W 060°11.639')	0940	155	7	Southwest	Downwind	Activity not visible from sample location	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
7 Railway property, 300m North of Ferry St. (N 46°08.874' W 060°11.663')	1000	155	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 50m South of new truck scale (N 46°09.279' W 060°11.639')	1000	155	8	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
9 50m South of new truck scale (N 46°09.279' W 060°11.639')	1030	155	7	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
10 Railway property, 300m North of Ferry St. (N 46°08.874' W 060°11.663')	1100	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 50m South of new truck scale (N 46°09.279' W 060°11.639')	1100	155	6	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
12 50m South of new truck scale (N 46°09.279' W 060°11.639')	1120	155	6	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
13 Railway property, 300m North of Ferry St. (N 46°08.874' W 060°11.663')	1200	155	7	Southwest	Upwind	Background	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
14 50m South of new truck scale (N 46°09.279' W 060°11.639')	1200	155	9	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
15 50m South of new truck scale (N 46°09.279' W 060°11.639')	1230	155	7	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
16 Railway property, 300m North of Ferry St. (N 46°08.874' W 060°11.663')	1300	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 50m South of new truck scale (N 46°09.279' W 060°11.639')	1300	155	6	Southwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
18 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1345	155	14	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
19 Railway property, 100m North of Ferry St. (N 46°08.794' W 060°11.596')	1400	155	20	South	Upwind	Background	No observations seen to affect sampling integrity
20 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1400	155	6	South	Downwind	Activity not visible from sample location	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
21 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1430	155	6	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
22 Railway property, 100m North of Ferry St. (N 46°08.794' W 060°11.596')	1500	155	9	South	Upwind	Background	No observations seen to affect sampling integrity
23 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1500	155	2	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
24 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1520	155	20	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
25 Railway property, 100m North of Ferry St. (N 46°08.794' W 060°11.596')	1600	155	8	South	Upwind	Background	No observations seen to affect sampling integrity
26 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1600	155	24	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
27 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1630	155	11	South	Downwind	Activity not visible from sample location	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
28 Railway property, 100m North of Ferry St. (N 46°08.794' W 060°11.596')	1700	155	8	South	Upwind	Background	No observations seen to affect sampling integrity
29 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1700	155	3	South	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
30 25m Northwest of new truck scale (N 46°09.347' W 060°11.702')	1745	155	2	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)
8	1	125
9	4	85
9	8	70

VOC Monitoring

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