

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1138-01
FROM	Grant Harrigan	SHIFT:	1045 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	8 th May, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0133

**SUBJECT: 7th May 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Cooling Pond
FINAL REPORT**

Attached is a summary of real-time particulate (as PM₁₀) results for air monitoring performed on the 7th of May, 2008. Colin 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:

- Sunny
- Temperature: 13°C
- Wind Direction: East to Northeast

Comments: *ALL-TECH was on-Site at 1100 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities.*

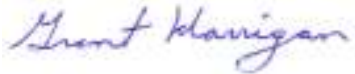
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

All downwind and upwind measurements of Total Volatile Organic Compounds (TVOC) were well 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), TVOC sampling is halted and resumes after the precipitation has ended.

This report has been prepared by Tyler Rowe and reviewed by Colin MacIsaac and Peter Ibrahim. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Grant Harrigan, 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 – Cooling Pond
7th May, 2008

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 20m North of Intercolonial Street fixed station	1120	155	9	East	Downwind	Site not visible	No observations seen to effect sampling integrity
2 20m North of Intercolonial Street fixed station	1140	155	9	East	Downwind	Site not visible	No observations seen to effect sampling integrity
3 150m North of STPA office	1200	155	10	East	Upwind	Background	No observations seen to effect sampling integrity
4 20m North of Intercolonial Street fixed station	1200	155	9	East	Downwind	Site not visible	No observations seen to effect sampling integrity
5 20m North of Intercolonial Street fixed station	1230	155	9	East	Downwind	Site not visible	No observations seen to effect sampling integrity
6 150m North of STPA office	1300	155	9	East	Upwind	Background	No observations seen to effect sampling integrity
7 20m North of Intercolonial Street fixed station	1300	155	15	East	Downwind	Site not visible	No observations seen to effect 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
8 20m North of Intercolonial Street fixed station	1330	155	17	East	Downwind	Site not visible	No observations seen to effect sampling integrity
9 150m North of STPA office	1400	155	17	East	Upwind	Background	No observations seen to effect sampling integrity
10 50m South of Intercolonial Street fixed station	1400	155	12	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
11 40m Northeast of Acadian Lines terminal	1445	155	6	Northeast	Downwind	Excavator moving material	No observations seen to effect sampling integrity
12 10m Southeast of Inglis Street and Spar Road	1500	155	9	Northeast	Upwind	Background	No observations seen to effect sampling integrity
13 40m Northeast of Acadian Lines terminal	1500	155	6	Northeast	Downwind	Excavator moving material	No observations seen to effect sampling integrity
14 40m Northeast of Acadian Lines terminal	1520	155	7	Northeast	Downwind	Excavator moving material	No observations seen to effect 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
13 10m Southeast of Inglis Street and Spar Road	1600	155	10	Northeast	Upwind	Background	No observations seen to effect sampling integrity
14 40m Northeast of Acadian Lines terminal	1600	155	9	Northeast	Downwind	Excavator moving material	No observations seen to effect sampling integrity
15 40m Northeast of Acadian Lines terminal	1645	155	7	Northeast	Downwind	Excavator moving material	No observations seen to effect sampling integrity

Notes: Air sample duration for each monitoring event was 15 minutes.

Comparison of Downwind Daily Results for Dust Budget

Location	Duration	Dust Budget Value ($\mu\text{g}/\text{m}^3$)	Dust Budget Exceedance Value ($\mu\text{g}/\text{m}^3$)
20m North of Intercolonial Street fixed station	1100 to 1159	9	990
20m North of Intercolonial Street fixed station	1200 to 1259	18	990
20m North of Intercolonial Street fixed station	1300 to 1359	34	990
50m South of Intercolonial Street fixed station / 40m Northeast of Acadian Lines terminal	1400 to 1459	43	990
40m Northeast of Acadian Lines terminal	1500 to 1559	50	990
40m Northeast of Acadian Lines terminal	1600 to 1659	58	990

VOC Monitoring

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