

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1165-04
FROM	Dianne Theriault	SHIFT:	0630 to 1315
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	18 th July, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0154

**SUBJECT: 18th July, 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 18th of July, 2008. Donald MacIsaac and Reg Peters of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Partly cloudy
- Temperature: approximately 22°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on-Site at 0630 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities.*

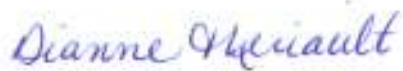
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

All downwind and upwind measurements of Total Volatile Organic Compounds (TVOC) were 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 – Cooling Pond
18th July, 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 40m Northwest of Northwest Corner of STPA Building	0700	155	22	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
2 35m Northeast of Bus Terminal	0705	155	20	SW	UW	Background	No observations seen to effect sampling integrity
3 40m Northwest of Northwest Corner of STPA Building	0730	155	17	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
4 35m Northeast of Bus Terminal	0800	155	16	SW	UW	Background	No observations seen to effect sampling integrity
5 40m Northwest of Northwest Corner of STPA Building	0800	155	14	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
6 40m Northwest of Northwest Corner of STPA Building	0825	155	14	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
7 35m Northeast of Bus Terminal	0900	155	16	SW	UW	Background	No observations seen to effect sampling integrity

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
8 40m Northwest of Northwest Corner of STPA Building	0900	155	14	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
9 30m Northwest of Northwest Corner of STPA Building	0930	155	13	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
10 35m Northeast of Bus Terminal	1000	155	15	SW	UW	Background	No observations seen to effect sampling integrity
11 30m Northwest of Northwest Corner of STPA Building	1000	155	13	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
12 30m Northwest of Northwest Corner of STPA Building	1030	155	16	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
13 35m Northeast of Bus Terminal	1100	155	19	SW	UW	Background	No observations seen to effect sampling integrity
14 30m Northwest of Northwest Corner of STPA Building	1100	155	16	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
15 30m Northwest of Northwest Corner of STPA Building	1140	155	18	SW	DW	Activity not visible from sampling location	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
16 35m Northeast of Bus Terminal	1200	155	24	SW	UW	Background	No observations seen to effect sampling integrity
17 30m Northwest of Northwest Corner of STPA Building	1200	155	22	SW	DW	Activity not visible from sampling location	No observations seen to effect sampling integrity
18 30m Northwest of Northwest Corner of STPA Building	1230	155	24	SW	DW	Activity not visible from sampling location	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 ($\mu\text{g}/\text{m}^3$)
40m Northwest of Northwest Corner of STPA Building	0700 - 0759	20	990
40m Northwest of Northwest Corner of STPA Building	0800- 0859	34	990
40m Northwest of Northwest Corner of STPA Building/ 30m Northwest of Northwest Corner of STPA Building	0900 - 0959	48	990
30m Northwest of Northwest Corner of STPA Building	1000 - 1059	62	990
30m Northwest of Northwest Corner of STPA Building	1100 - 1159	79	990
30m Northwest of Northwest Corner of STPA Building	1200 - 1259	103	990

VOC Monitoring

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