

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1165-01
FROM	Dianne Theriault	SHIFT:	0630 to 1630
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	3 rd July, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0151

**SUBJECT: 3rd 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 3rd 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:

- Clear with cloudy periods
- Temperature: approximately 28°C
- Wind Direction: Southwest to West

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.*

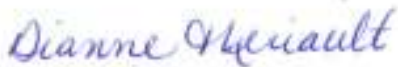
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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
3rd 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 35m Northeast of Acadian Lines Bus Terminal	0700	155	16	SW	UW	Background	No observations seen to effect sampling integrity
2 90m Northeast of Northeast corner of STPA Building	0700	155	16	SW	DW	No Activity observed on-site	No observations seen to effect sampling integrity
3 90m Northeast of Northeast corner of STPA Building	0730	155	16	SW	DW	No Activity observed on-site	No observations seen to effect sampling integrity
4 35m Northeast of Acadian Lines Bus Terminal	0800	155	18	SW	UW	Background	No observations seen to effect sampling integrity
5 90m Northeast of Northeast corner of STPA Building	0800	155	20	SW	UW	No Activity observed on-site	No observations seen to effect sampling integrity
6 90m Northeast of Northeast corner of STPA Building	0830	155	29	SW	DW	Machine Moving Material	No observations seen to effect sampling integrity
7 10m South of Intercolonial Monitoring Station	0920	155	34	W	UW	Background	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 30m Southwest of Southwest Corner of STPA Building	0900	155	28	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
9 30m Southwest of Southwest Corner of STPA Building	0925	155	35	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
10 10m South of Intercolonial Monitoring Station	1000	155	33	W	UW	Background	No observations seen to effect sampling integrity
11 30m Southwest of Southwest Corner of STPA Building	1000	155	45	W	DW	Trucks Dumping/ Machine moving materials	No observations seen to effect sampling integrity
12 30m Southwest of Southwest Corner of STPA Building	1020	155	42	W	DW	Trucks Dumping/ Machine moving materials	No observations seen to effect sampling integrity
13 10m South of Intercolonial Monitoring Station	1100	155	37	W	UW	Background	No observations seen to effect sampling integrity
14 30m Southwest of Southwest Corner of STPA Building	1100	155	43	W	DW	Worker with hand tools	No observations seen to effect sampling integrity
15 30m Southwest of Southwest Corner of STPA Building	1120	155	49	W	DW	Trucks Dumping	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 10m South of Intercolonial Monitoring Station	1200	155	31	W	UW	Background	No observations seen to effect sampling integrity
17 30m Southwest of Southwest Corner of STPA Building	1200	155	33	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
18 30m Southwest of Southwest Corner of STPA Building	1240	155	31	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
19 10m South of Intercolonial Monitoring Station	1300	155	23	W	UW	Background	No observations seen to effect sampling integrity
20 30m Southwest of Southwest Corner of STPA Building	1300	155	41	W	DW	Trucks dumping/ Machines moving materials	No observations seen to effect sampling integrity
21 30m Southwest of Southwest Corner of STPA Building	1345	155	35	W	DW	Worker using hand tools	No observations seen to effect sampling integrity
22 10m South of Intercolonial Monitoring Station	1400	155	25	W	UW	Background	No observations seen to effect sampling integrity
23 30m Southwest of Southwest Corner of STPA Building	1400	155	69	W	DW	Worker using hand tools	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
24 30m Southwest of Southwest Corner of STPA Building	1420	155	35	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
25 10m South of Intercolonial Monitoring Station	1500	155	25	W	UW	Background	No observations seen to effect sampling integrity
26 30m Southwest of Southwest Corner of STPA Building	1500	155	32	W	DW	No Activity observed on-site	No observations seen to effect sampling integrity
27 30m Southwest of Southwest Corner of STPA Building	1545	155	34	W	DW	No Activity observed on-site	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 ($\mu\text{g}/\text{m}^3$)
90m Northeast of Northeast corner of STPA Building	0700 - 0759	16	990
90m Northeast of Northeast corner of STPA Building	0800 - 0859	41	990
30m Southwest of Southwest Corner of STPA Building	0900- 0959	73	990
30m Southwest of Southwest Corner of STPA Building	1000 - 1059	117	990
30m Southwest of Southwest Corner of STPA Building	1100 - 1159	163	990
30m Southwest of Southwest Corner of STPA Building	1200 - 1259	195	990
30m Southwest of Southwest Corner of STPA Building	1300 - 1359	233	990
30m Southwest of Southwest Corner of STPA Building	1400 - 1459	285	990
30m Southwest of Southwest Corner of STPA Building	1500 - 1559	316	990

VOC Monitoring

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