

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1153-08
FROM	Peter Ibrahim	SHIFT:	0630 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	12 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0147

**SUBJECT: 11th June, 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 11th of June, 2008. Colin MacIsaac and Donald MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Overcast giving way to sunny periods
- Temperature: approximately 15°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 Colin MacIsaac and reviewed by Peter Ibrahim and Dianne Theriault. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Peter Ibrahim,
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
11th June, 2008

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 35m Northeast of Acadian Lines terminal	0700	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
2 20m North of STPA Building	0700	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
3 20m North of STPA Building	0715	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
4 35m Northeast of Acadian Lines terminal	0800	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
5 20m North of STPA Building	0800	155	5	Southwest	Downwind	Trucks dumping material, bulldozer operating	No observations seen to effect sampling integrity
6 20m North of STPA Building	0845	155	6	Southwest	Downwind	Trucks dumping material, bulldozer operating	No observations seen to effect sampling integrity
7 35m Northeast of Acadian Lines terminal	0900	155	3	Southwest	Upwind	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 20m North of STPA Building	0900	155	5	Southwest	Downwind	Trucks dumping material, bulldozer operating	No observations seen to effect sampling integrity
9 20m North of STPA Building	0930	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
10 35m Northeast of Acadian Lines terminal	1000	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 20m North of STPA Building	1000	155	4	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
12 20m North of STPA Building	1015	155	4	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
13 35m Northeast of Acadian Lines terminal	1100	155	3	Southwest	Upwind	Background	No observations seen to effect sampling integrity
14 20m North of STPA Building	1100	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
15 20m North of STPA Building	1145	155	7	Southwest	Downwind	No activity observed on-site	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 Acadian Lines terminal	1200	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
17 20m North of STPA Building	1200	155	6	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
18 20m North of STPA Building	1230	155	7	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
19 35m Northeast of Acadian Lines terminal	1300	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
20 20m North of STPA Building	1300	155	6	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
21 20m North of STPA Building	1345	155	6	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
22 35m Northeast of Acadian Lines terminal	1400	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
23 20m North of STPA Building	1400	155	5	Southwest	Downwind	No activity observed on-site	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 20m North of STPA Building	1420	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
25 35m Northeast of Acadian Lines terminal	1500	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
26 20m North of STPA Building	1500	155	5	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
27 20m North of STPA Building	1530	155	6	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
28 35m Northeast of Acadian Lines terminal	1600	155	4	Southwest	Upwind	Background	No observations seen to effect sampling integrity
29 20m North of STPA Building	1600	155	7	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
30 20m North of STPA Building	1615	155	6	Southwest	Downwind	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 ($\mu\text{g}/\text{m}^3$)
20m North of STPA Building	0700 to 0759	5	990
20m North of STPA Building	0800 to 0859	10	990
20m North of STPA Building	0900 to 0959	15	990
20m North of STPA Building	1000 to 1059	20	990
20m North of STPA Building	1100 to 1159	26	990
20m North of STPA Building	1200 to 1259	33	990
20m North of STPA Building	1300 to 1359	39	990
20m North of STPA Building	1400 to 1459	44	990
20m North of STPA Building	1500 to 1559	50	990
20m North of STPA Building	1600 to 1659	57	990

VOC Monitoring

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