

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1193-27
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	1 st October, 2008		Terry Smith, ALL-TECH
		STPA NO.	PS-0071

**SUBJECT: 30th September, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – South Pond Pilot Study
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 30th of September, 2008. Reg Peters 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:

- Overcast with showers
- Temperature: approximately 15°C
- Wind Direction: Northwest to West

Comments: *ALL-TECH was on-Site at 0730 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities. Air monitoring was put on standby between 1030 and 1400 due to precipitation.*

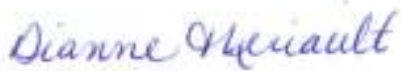
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Tyler Rowe 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:

Shawn Bernon shawn@tarpondscleanup.ca, Wilfred Kaiser wilfred@tarpondscleanup.ca, Nancy LeDrew nancy@tarpondscleanup.ca, Trish Magliaro trish@tarpondscleanup.ca, Terry Smith tsmith@toalltech.com, Phyllis Low pilow@toalltech.com, Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@croworld.com, Darren Lawless dlawless@toalltech.com, Kevin Mac Pherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – South Pond Pilot Study
30th September, 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 Railway property, 60m North of Ferry Street	0800	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 100m North of STPA building	0800	155	5	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 100m North of STPA building	0830	155	5	Northwest	Downwind	Crane operating	No observations seen to effect sampling integrity
4 Railway property, 60m North of Ferry Street	0900	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 100m North of STPA building	0900	155	5	Northwest	Downwind	Crane operating	No observations seen to effect sampling integrity
6 100m North of STPA building	0915	155	5	Northwest	Downwind	Crane operating	No observations seen to effect sampling integrity
7 Railway property, 60m North of Ferry Street	1000	155	4	Northwest	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
8 100m North of STPA building	1000	155	5	Northwest	Downwind	Crane operating	No observations seen to effect sampling integrity
9 Railway property, 60m North of Ferry Street	1430	155	8	West	Upwind	Background	No observations seen to affect sampling integrity
10 90m Southeast of Inglis Street and Spar Road intersection	1430	155	3	West	Downwind	Crane operating	No observations seen to effect sampling integrity
11 90m Southeast of Inglis Street and Spar Road intersection	1445	155	4	West	Downwind	Crane operating	No observations seen to effect sampling integrity
12 Railway property, 60m North of Ferry Street	1500	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
13 90m Southeast of Inglis Street and Spar Road intersection	1500	155	6	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
14 90m Southeast of Inglis Street and Spar Road intersection	1530	155	7	West	Downwind	Crane operating	No observations seen to effect sampling integrity
15 Railway property, 60m North of Ferry Street	1600	155	7	West	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
16 90m Southeast of Inglis Street and Spar Road intersection	1600	155	7	West	Downwind	Crane operating	No observations seen to effect sampling integrity
17 90m Southeast of Inglis Street and Spar Road intersection	1645	155	7	West	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 ($\mu\text{g}/\text{m}^3$)
100m North of STPA building	0800 to 0859	5	990
100m North of STPA building	0900 to 0959	10	990
100m North of STPA building	1000 to 1059	14	990
90m Southeast of Inglis Street and Spar Road intersection	1400 to 1459	18	990
90m Southeast of Inglis Street and Spar Road intersection	1500 to 1559	25	990
90m Southeast of Inglis Street and Spar Road intersection	1600 to 1659	32	990

VOC Monitoring

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