

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1193-26
FROM	Dianne Theriault	SHIFT:	0730 to 1330
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	29 th September, 2008	STPA NO.	PS-0070

**SUBJECT: 29th 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 29th 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
- Temperature: approximately 15°C
- Wind Direction: Southwest

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. Activities were terminated for the day at 1300 due to high winds.*

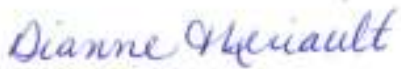
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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:

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Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – South Pond Pilot Study
29th September, 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 10m North of Intercolonial Street fixed station	0800	155	32	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 Spar Road, 20m West of Inglis Street	0800	155	29	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 Spar Road, 20m West of Inglis Street	0830	155	29	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
4 10m North of Intercolonial Street fixed station	0900	155	35	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 Spar Road, 20m West of Inglis Street	0900	155	31	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
6 Spar Road, 20m West of Inglis Street	0925	155	31	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
7 10m North of Intercolonial Street fixed station	1000	155	36	Southwest	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 Spar Road, 20m West of Inglis Street	1000	155	29	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
9 Spar Road, 20m West of Inglis Street	1045	155	26	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
10 10m North of Intercolonial Street fixed station	1100	155	30	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 Spar Road, 20m West of Inglis Street	1100	155	23	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
12 Spar Road, 20m West of Inglis Street	1125	155	25	Southwest	Downwind	Crane operating	No observations seen to effect sampling integrity
13 10m North of Intercolonial Street fixed station	1200	155	28	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 Spar Road, 20m West of Inglis Street	1200	155	22	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 Spar Road, 20m West of Inglis Street	1230	155	23	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 ($\mu\text{g}/\text{m}^3$)
Spar Road, 20m West of Inglis Street	0800 to 0859	29	990
Spar Road, 20m West of Inglis Street	0900 to 0959	60	990
Spar Road, 20m West of Inglis Street	1000 to 1059	88	990
Spar Road, 20m West of Inglis Street	1100 to 1159	112	990
Spar Road, 20m West of Inglis Street	1200 to 1259	135	990

VOC Monitoring

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