

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1193-14
FROM	Dianne Theriault	SHIFT:	0730 to 1145
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	16 th September, 2008	STPA NO.	PS-0058

**SUBJECT: 15th 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 15th of September, 2008. Grant Harrigan and Alison Giovannetti of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly Cloudy
- Temperature: approximately 20°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. As directed by the STPA, monitoring was concluded at 1115 as there were no other activities scheduled on site for the remainder of the day.*

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 Grant Harrigan 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
15th 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 10m South of Spar Road and Inglis Street Intersection	0810	155	0	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
2 Intercolonial fixed sampling location	0812	155	23	Southwest	Upwind	Background	No observations seen to effect sampling integrity
3 10m South of Spar Road and Inglis Street Intersection	0826	155	18	Southwest	Downwind	Workers on site	No observations seen to effect sampling integrity
4 Intercolonial fixed sampling location	0900	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 10m South of Spar Road and Inglis Street Intersection	0900	155	29	Southwest	Downwind	Workers on site	No observations seen to effect sampling integrity
6 10m South of Spar Road and Inglis Street Intersection	0941	155	17	Southwest	Downwind	Crane in operation	No observations seen to effect sampling integrity
7 Intercolonial fixed sampling location	1000	155	19	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 10m South of Spar Road and Inglis Street Intersection	1000	155	11	Southwest	Downwind	No activity observed on site	Crane has been moved to another site
9 10m South of Spar Road and Inglis Street Intersection	1030	155	12	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
10 10m North of Intercolonial Fixed Station	1100	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 10m South of Spar Road and Inglis Street Intersection	1100	155	16	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 ($\mu\text{g}/\text{m}^3$)
10m South of Spar Road and Inglis Street Intersection	0800 to 0859	9	990
10m South of Spar Road and Inglis Street Intersection	0900 to 0959	37	990
10m South of Spar Road and Inglis Street Intersection	1000 to 1059	55	990
10m South of Spar Road and Inglis Street Intersection	1100 to 1159	71	990

VOC Monitoring

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