

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1225-06
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	12 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0050

**SUBJECT: 10th November 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Material Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 10th of November, 2008. Reg Peters and Colin MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly Sunny
- Temperature: approximately 10°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.*

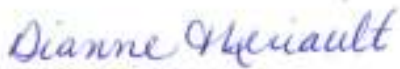
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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 – Material Processing Facility
10th November, 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 30m North of Ferry Street, Walker Street intersection	0800	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 15m Northwest of Inglis Street, Spar Road intersection	0800	155	16	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 15m Northwest of Inglis Street, Spar Road intersection	0830	155	12	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
4 30m North of Ferry Street, Walker Street intersection	0900	155	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 15m Northwest of Inglis Street, Spar Road intersection	0900	155	11	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
6 15m Northwest of Inglis Street, Spar Road intersection	0920	155	9	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
7 30m North of Ferry Street, Walker Street intersection	1000	155	10	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 15m Northwest of Inglis Street, Spar Road intersection	1000	155	9	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
9 15m Northwest of Inglis Street, Spar Road intersection	1030	155	9	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
10 30m North of Ferry Street, Walker Street intersection	1100	155	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 15m Northwest of Inglis Street, Spar Road intersection	1100	155	9	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
12 15m Northwest of Inglis Street, Spar Road intersection	1140	155	9	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
13 30m North of Ferry Street, Walker Street intersection	1200	155	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 15m Northwest of Inglis Street, Spar Road intersection	1200	155	8	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 15m Northwest of Inglis Street, Spar Road intersection	1245	155	8	Southwest	Downwind	Machines moving material	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 30m North of Ferry Street, Walker Street intersection	1300	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 15m Northwest of Inglis Street, Spar Road intersection	1300	155	8	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
18 15m Northwest of Inglis Street, Spar Road intersection	1315	155	8	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
19 30m North of Ferry Street, Walker Street intersection	1400	155	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 15m Northwest of Inglis Street, Spar Road intersection	1400	155	7	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
21 15m Northwest of Inglis Street, Spar Road intersection	1440	155	7	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
22 30m North of Ferry Street, Walker Street intersection	1500	155	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 15m Northwest of Inglis Street, Spar Road intersection	1500	155	8	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 15m Northwest of Inglis Street, Spar Road intersection	1545	155	9	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
25 30m North of Ferry Street, Walker Street intersection	1600	155	11	Southwest	Upwind	Background	No observations seen to effect sampling integrity
26 15m Northwest of Inglis Street, Spar Road intersection	1600	155	8	Southwest	Downwind	Machines moving material	No observations seen to effect sampling integrity
27 15m Northwest of Inglis Street, Spar Road intersection	1645	155	10	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 ($\mu\text{g}/\text{m}^3$)
15m Northwest of Inglis Street, Spar Road intersection	0800 to 0859	14	990
15m Northwest of Inglis Street, Spar Road intersection	0900 to 0959	24	990
15m Northwest of Inglis Street, Spar Road intersection	1000 to 1059	34	990
15m Northwest of Inglis Street, Spar Road intersection	1100 to 1159	43	990
15m Northwest of Inglis Street, Spar Road intersection	1200 to 1259	51	990
15m Northwest of Inglis Street, Spar Road intersection	1300 to 1359	59	990
15m Northwest of Inglis Street, Spar Road intersection	1400 to 1459	66	990
15m Northwest of Inglis Street, Spar Road intersection	1500 to 1559	75	990
15m Northwest of Inglis Street, Spar Road intersection	1600 to 1659	84	990

VOC Monitoring

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