

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-05
FROM	Dianne Theriault	SHIFT:	0630 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	9 th September, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0009

**SUBJECT: 8th September, 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 8th of September, 2008. Colin MacIsaac 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:

- Cloudy with sunny periods
- Temperature: approximately 20°C
- Wind Direction: West to Northwest to North

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.*

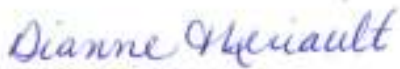
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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
8th 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 20m North of Walker Street, Ferry Street intersection	0725	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
2 150m North of Spar Road on Inglis Street	0725	155	5	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 150m North of Spar Road on Inglis Street	0745	155	6	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
4 20m North of Walker Street, Ferry Street intersection	0800	155	7	West	Upwind	Background	No observations seen to affect sampling integrity
5 150m North of Spar Road on Inglis Street	0800	155	8	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
6 150m North of Spar Road on Inglis Street	0815	155	7	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 20m North of Walker Street, Ferry Street intersection	0900	155	2	West	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 150m North of Spar Road on Inglis Street	0900	155	3	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 150m North of Spar Road on Inglis Street	0925	155	3	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 40m East of Midway Building	1000	155	3	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 50m North of Spar Road on Inglis Street	1000	155	4	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
12 50m North of Spar Road on Inglis Street	1030	155	5	Northwest	Downwind	No activity observed on site	Excavator operating within 2m of instrument
13 40m East of Midway Building	1100	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 15m North of Spar Road on Inglis Street	1100	155	5	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 15m North of Spar Road on Inglis Street	1120	155	4	Northwest	Downwind	Excavator operating	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 40m East of Midway Building	1200	155	2	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 150m North of Spar Road on Inglis Street	1200	155	4	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
18 150m North of Spar Road on Inglis Street	1245	155	7	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
19 40m East of Midway Building	1300	155	3	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 150m North of Spar Road on Inglis Street	1300	155	6	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
21 150m North of Spar Road on Inglis Street	1330	155	6	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
22 40m East of Midway Building	1400	155	3	Northwest	Upwind	Background	No observations seen to affect sampling integrity
23 150m North of Spar Road on Inglis Street	1400	155	7	Northwest	Downwind	Excavators operating	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 150m North of Spar Road on Inglis Street	1415	155	8	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
25 40m East of Midway Building	1500	155	2	Northwest	Upwind	Background	No observations seen to affect sampling integrity
26 150m North of Spar Road on Inglis Street	1500	155	12	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
27 150m North of Spar Road on Inglis Street	1540	155	26	Northwest	Downwind	Excavators operating	No observations seen to effect sampling integrity
28 40m East of Midway Building	1600	155	1	North	Upwind	Background	No observations seen to effect sampling integrity
29 10m West of Inglis Street, Spar Road Intersection	1600	155	2	North	Downwind	Excavators operating	No observations seen to effect sampling integrity
30 10m West of Inglis Street, Spar Road Intersection	1645	155	3	North	Downwind	Excavators operating	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 ($\mu\text{g}/\text{m}^3$)
150m North of Spar Road on Inglis Street	0700 to 0759	6	990
150m North of Spar Road on Inglis Street	0800 to 0859	13	990
150m North of Spar Road on Inglis Street	0900 to 0959	16	990
50m North of Spar Road on Inglis Street	1000 to 1059	21	990
15m North of Spar Road on Inglis Street	1100 to 1159	26	990
150m North of Spar Road on Inglis Street	1200 to 1259	32	990
150m North of Spar Road on Inglis Street	1300 to 1359	38	990
150m North of Spar Road on Inglis Street	1400 to 1459	46	990
150m North of Spar Road on Inglis Street	1500 to 1559	65	990
10m West of Inglis Street, Spar Road Intersection	1600 to 1659	68	990

VOC Monitoring

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