

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-04
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	9 th September, 2008	STPA NO.	TP2-0008

**SUBJECT: 5th September, 2008, Real-time Air Monitoring Results (Revised)
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 5th of September, 2008. Kelly Morrison 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:

- Mainly sunny
- Temperature: approximately 20°C
- Wind Direction: Northwest

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.*

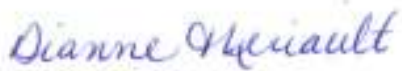
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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 – Material Processing Facility
5th 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 Walker Street, 30m North of Ferry Street	0800	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 Southeast corner of Inglis Street and Spar Road	0800	155	10	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 Southeast corner of Inglis Street and Spar Road	0840	155	10	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 Walker Street, 30m North of Ferry Street	0900	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 Southeast corner of Inglis Street and Spar Road	0900	155	9	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Southeast corner of Inglis Street and Spar Road	0920	155	13	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 Walker Street, 30m North of Ferry Street	1000	155	7	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 Southeast corner of Inglis Street and Spar Road	1000	155	12	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 Southeast corner of Inglis Street and Spar Road	1015	155	12	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 Walker Street, 30m North of Ferry Street	1100	155	11	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 30m East of Ferry Street bridge	1100	155	9	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 30m East of Ferry Street bridge	1130	155	70	Northwest	Downwind	Excavator operating	Excavator operating within 2m of instrument
13 Walker Street, 30m North of Ferry Street	1200	155	10	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 30m East of Ferry Street bridge	1200	155	13	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 30m East of Ferry Street bridge	1230	155	13	Northwest	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
16 Railway property, 200m North of Ferry Street	1300	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 50m East of Ferry Street bridge	1300	155	10	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 100m East of Ferry Street bridge	1325	155	8	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 Railway property, 200m North of Ferry Street	1400	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 100m East of Ferry Street bridge	1400	155	9	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
21 100m East of Ferry Street bridge	1435	155	10	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 Railway property, 200m North of Ferry Street	1500	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
23 50m East of Ferry Street bridge	1500	155	9	Northwest	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 50m East of Ferry Street bridge	1535	155	10	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 Railway property, 200m North of Ferry Street	1600	155	8	Northwest	Upwind	Background	No observations seen to affect sampling integrity
26 50m East of Ferry Street bridge	1600	155	10	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
27 50m East of Ferry Street bridge	1645	155	10	Northwest	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 ($\mu\text{g}/\text{m}^3$)
Southeast corner of Inglis Street and Spar Road	0800 to 0859	10	990
Southeast corner of Inglis Street and Spar Road	0900 to 0959	22	990
Southeast corner of Inglis Street and Spar Road	1000 to 1059	34	990
30m East of Ferry Street bridge	1100 to 1159	73	990
30m East of Ferry Street bridge	1200 to 1259	86	990
50m / 100m East of Ferry Street bridge	1300 to 1359	95	990
100m East of Ferry Street bridge	1400 to 1459	105	990
100m / 50m East of Ferry Street bridge	1500 to 1559	115	990
100m East of Ferry Street bridge	1600 to 1659	125	990

VOC Monitoring

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