

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-09
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	14 th September, 2008	STPA NO.	TP2-0013

**SUBJECT: 12th September, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Materials Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 12th of September, 2008. Alison Giovannetti 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:

- Sunny with cloudy periods
- Temperature: approximately 18°C
- Wind Direction: Southwest to West

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 – Materials Processing Facility
12th 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 Intercolonial Street, 10m S of Ferry Street	0800	155	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 Inglis Street, 150m North of Spar Road	0800	155	10	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 Inglis Street, 150m North of Spar Road	0820	155	11	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 Intercolonial Street, 10m S of Ferry Street	0900	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 Inglis Street, 150m North of Spar Road	0900	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Inglis Street, 150m North of Spar Road	0945	155	9	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 Intercolonial Street, 10m S of Ferry Street	1000	155	7	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 Inglis Street, 150m North of Spar Road	1000	155	8	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
9 Inglis Street, 150m North of Spar Road	1040	155	10	Southwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 Walker Street, 5m N of Ferry Street	1100	155	8	West	Upwind	Background	No observations seen to affect sampling integrity
11 Inglis Street, 100m North of Spar Road	1100	155	9	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 Inglis Street, 100m North of Spar Road	1135	155	11	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 Walker Street, 5m N of Ferry Street	1200	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
14 Inglis Street, 100m North of Spar Road	1200	155	8	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 Inglis Street, 100m North of Spar Road	1215	155	9	West	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 Walker Street, 5m N of Ferry Street	1300	155	9	West	Upwind	Background	No observations seen to affect sampling integrity
17 Inglis Street, 100m North of Spar Road	1300	155	12	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 Inglis Street, 100m North of Spar Road	1325	155	12	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 Walker Street, 5m N of Ferry Street	1400	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
20 Inglis Street, 100m North of Spar Road	1400	155	17	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 Inglis Street, 100m North of Spar Road	1430	155	22	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 Walker Street, 5m N of Ferry Street	1500	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
23 Inglis Street, 100m North of Spar Road	1500	155	14	West	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 Inglis Street, 100m North of Spar Road	1545	155	11	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 Walker Street, 5m N of Ferry Street	1600	155	7	West	Upwind	Background	No observations seen to affect sampling integrity
26 Inglis Street, 150m North of Spar Road	1600	155	13	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
27 Inglis Street, 150m North of Spar Road	1645	155	9	West	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 ($\mu\text{g}/\text{m}^3$)
Inglis Street, 150m North of Spar Road	0800 to 0859	11	990
Inglis Street, 150m North of Spar Road	0900 to 0959	20	990
Inglis Street, 150m North of Spar Road	1000 to 1059	29	990
Inglis Street, 100m North of Spar Road	1100 to 1159	39	990
Inglis Street, 100m North of Spar Road	1200 to 1259	48	990
Inglis Street, 100m North of Spar Road	1300 to 1359	60	990
Inglis Street, 100m North of Spar Road	1400 to 1459	80	990
Inglis Street, 100m North of Spar Road	1500 to 1559	93	990
Inglis Street, 150m North of Spar Road	1600 to 1659	104	990

VOC Monitoring

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