

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-07
FROM	Dianne Theriault	SHIFT:	0930 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	11 th September, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0011

**SUBJECT: 10th 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 10th of September, 2008. Kelly Morrison, Reg Peters, Colin MacIsaac, and Grant Harrigan 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: Northwest

Comments: *ALL-TECH was on-Site at 0930 and sampling began as soon as weather conditions were within instrument specifications. Air monitoring was performed during EarthTech's construction activities.*

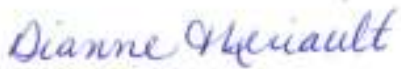
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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 – Materials Processing Facility
10th September, 2008

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
1 15m North of Railway and Ferry Street Intersection	1100	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 50m North of Inglis Street and Spar Road Intersection	1100	155	10	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
3 50m North of Inglis Street and Spar Road Intersection	1135	155	8	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
4 15m North of Railway and Ferry Street Intersection	1200	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 100m South of Inglis Street and Spar Road Intersection	1218	155	9	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
6 100m South of Inglis Street and Spar Road Intersection	1235	155	13	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
7 15m North of Railway and Ferry Street Intersection	1300	155	4	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 100m South of Inglis Street and Spar Road Intersection	1328	155	10	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
9 100m South of Inglis Street and Spar Road Intersection	1347	155	10	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
10 15m North of Railway and Ferry Street Intersection	1400	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 100m South of Inglis Street and Spar Road Intersection	1408	155	11	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
12 100m South of Inglis Street and Spar Road Intersection	1423	155	12	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
13 15m North of Railway and Ferry Street Intersection	1500	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 100m South of Inglis Street and Spar Road Intersection	1529	155	10	Northwest	Downwind	Excavator digging material	No observations seen to effect sampling integrity
15 100m South of Inglis Street and Spar Road Intersection	1544	155	11	Northwest	Downwind	Excavator digging material	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 10m North of Intercolonial Fixed Sampling Station	1600	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 100m South of Inglis Street and Spar Road Intersection	1600	155	10	Northwest	Downwind	Excavator digging material	No observations seen to affect sampling integrity
18 100m South of Inglis Street and Spar Road Intersection	1620	155	15	Northwest	Downwind	Excavator digging material	No observations seen to affect 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 ($\mu\text{g}/\text{m}^3$)
50m North of Inglis Street and Spar Road Intersection	1100 to 1159	9	990
100m South of Inglis Street and Spar Road Intersection	1200 to 1259	20	990
100m South of Inglis Street and Spar Road Intersection	1300 to 1359	30	990
100m South of Inglis Street and Spar Road Intersection	1400 to 1459	42	990
100m South of Inglis Street and Spar Road Intersection	1500 to 1559	53	990
100m South of Inglis Street and Spar Road Intersection	1600 to 1659	66	990

VOC Monitoring

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