

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1291-06
FROM	Dianne Theriault	SHIFT:	1030 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	8 th April, 2009		Terry Smith, ALL-TECH
		STPA NO.	TP2-0140

**SUBJECT: 8th April, 2009, 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 April, 2009. Tyler Rowe and Trevor Rowe of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Overcast, periods of rain, sunny with cloudy periods
- Temperature: approximately 8°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on standby until 1030 hours, and sampling began as soon as weather conditions were within instrument specifications. Air monitoring was performed during AECOM's construction activities.*

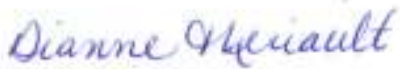
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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
8th April, 2009

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 fixed station	1230	155	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 Inglis Street, 100m North of Spar Road	1230	155	10	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
3 Inglis Street, 100m North of Spar Road	1245	155	11	Southwest	Downwind	Activity not visible from monitoring location	No observations seen to affect sampling integrity
4 Intercolonial Street fixed station	1300	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 Inglis Street, 100m North of Spar Road	1300	155	13	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
6 Inglis Street, 100m North of Spar Road	1345	155	13	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity

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
7 Intercolonial Street fixed station	1400	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 Inglis Street, 100m North of Spar Road	1400	155	16	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
9 Inglis Street, 100m North of Spar Road	1415	155	15	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
10 Intercolonial Street fixed station	1500	155	27	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 Inglis Street, 100m North of Spar Road	1500	155	15	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
12 Inglis Street, 100m North of Spar Road	1535	155	16	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
13 Intercolonial Street fixed station	1600	155	17	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
14 Inglis Street, 100m North of Spar Road	1600	155	14	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
15 Inglis Street, 100m North of Spar Road	1645	155	16	Southwest	Downwind	No activity observed on site	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 ($\mu\text{g}/\text{m}^3$)
Inglis Street, 100m North of Spar Road	1200 to 1259	11	990
Inglis Street, 100m North of Spar Road	1300 to 1359	24	990
Inglis Street, 100m North of Spar Road	1400 to 1459	39	990
Inglis Street, 100m North of Spar Road	1500 to 1559	55	990
Inglis Street, 100m North of Spar Road	1600 to 1659	70	990

VOC Monitoring

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