

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1225-18
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	28 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0062

**SUBJECT: 28th November, 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 28th of November, 2008. Jennifer Andrews and Reggie Peters, 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 8°C
- Wind Direction: Northeast to Southwest

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.*

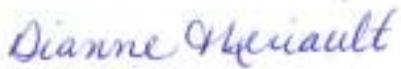
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Jennifer Andrews 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
28th November, 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 10m North of Inglis and Ferry Intersection	0800	155	17	Northeast	Upwind	Background	No observations seen to affect sampling integrity
2 60m NW of Inglis and Sparr Intersection	0800	155	29	Northeast	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 60m NW of Inglis and Sparr Intersection	0825	155	19	Northeast	Downwind	Machines moving material	No observations seen to affect sampling integrity
4 10m North of Inglis and Ferry Intersection	0900	155	18	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 160m NW of Inglis and Sparr Intersection	0900	155	17	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
6 160m NW of Inglis and Sparr Intersection	0920	155	15	Southwest	Downwind	Machines moving material	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 10m North of Inglis and Ferry Intersection	1000	155	18	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 160m NW of Inglis and Sparr Intersection	1000	155	16	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 160m NW of Inglis and Sparr Intersection	1045	155	12	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
10 10m North of Inglis and Ferry Intersection	1100	155	13	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 160m NW of Inglis and Sparr Intersection	1100	155	12	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
12 160m NW of Inglis and Sparr Intersection	1125	155	15	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
13 10m North of Inglis and Ferry Intersection	1200	155	18	Southwest	Upwind	Background	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
14 160m NW of Inglis and Sparr Intersection	1200	155	15	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 160m NW of Inglis and Sparr Intersection	1230	155	15	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
16 10m North of Inglis and Ferry Intersection	1300	155	13	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 160m NW of Inglis and Sparr Intersection	1300	155	14	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
18 160m NW of Inglis and Sparr Intersection	1345	155	14	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
19 10m North of Inglis and Ferry Intersection	1400	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 160m NW of Inglis and Sparr Intersection	1400	155	15	Southwest	Downwind	Machines moving material	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
21 160m NW of Inglis and Sparr Intersection	1440	155	17	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
22 10m North of Inglis and Ferry Intersection	1500	155	16	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 160m NW of Inglis and Sparr Intersection	1500	155	15	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
24 160m NW of Inglis and Sparr Intersection	1515	155	16	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
25 10m North of Inglis and Ferry Intersection	1600	155	30	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 160m NW of Inglis and Sparr Intersection	1600	155	18	Southwest	Downwind	Machines moving material	No observations seen to affect sampling integrity
27 160m NW of Inglis and Sparr Intersection	1645	155	19	Southwest	Downwind	Machines moving 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 ($\mu\text{g}/\text{m}^3$)
60m NW of Inglis and Sparr Intersection	0800 to 0859	24	990
160m NW of Inglis and Sparr Intersection	0900 to 0959	41	990
160m NW of Inglis and Sparr Intersection	1000 to 1059	55	990
160m NW of Inglis and Sparr Intersection	1100 to 1159	69	990
160m NW of Inglis and Sparr Intersection	1200 to 1259	84	990
160m NW of Inglis and Sparr Intersection	1300 to 1359	98	990
160m NW of Inglis and Sparr Intersection	1400 to 1459	114	990
160m NW of Inglis and Sparr Intersection	1500 to 1559	130	990
160m NW of Inglis and Sparr Intersection	1600 to 1659	149	990

VOC Monitoring

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