

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1225-16
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	27 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0060

**SUBJECT: 26th 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 26th of November, 2008. Reg Peters and Alison Giovannetti of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Overcast with showers developing later in the day
- Temperature: approximately 6°C
- Wind Direction: Southeast

Comments: *ALL-TECH was on-Site at 0630 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities. Air monitoring was put on standby between 1600 and 1700 due to precipitation.*

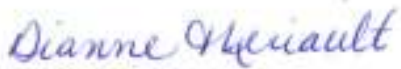
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Alison Giovannetti 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
26th 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 200m NE of STPA building	0800	155	9	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 200m NW of Ferry St. & railroad intersection	0800	155	7	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
3 200m NW of Ferry St. & railroad intersection	0835	155	7	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
4 200m NE of STPA building	0900	155	10	Southeast	Upwind	Background	No observations seen to affect sampling integrity
5 200m NW of Ferry St. & railroad intersection	0900	155	8	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
6 200m NW of Ferry St. & railroad intersection	0940	155	12	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
7 200m NE of STPA building	1000	155	14	Southeast	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 200m NW of Ferry St. & railroad intersection	1000	155	11	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
9 200m NW of Ferry St. & railroad intersection	1045	155	8	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
10 200m NE of STPA building	1100	155	13	Southeast	Upwind	Background	No observations seen to affect sampling integrity
11 200m NW of Ferry St. & railroad intersection	1100	155	8	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
12 200m NW of Ferry St. & railroad intersection	1145	155	10	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
13 200m NE of STPA building	1200	155	17	Southeast	Upwind	Background	No observations seen to affect sampling integrity
14 200m NW of Ferry St. & railroad intersection	1200	155	10	Southeast	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 200m NW of Ferry St. & railroad intersection	1245	155	12	Southeast	Downwind	Machines moving 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 200m NE of STPA building	1300	155	18	Southeast	Upwind	Background	No observations seen to affect sampling integrity
17 200m NW of Ferry St. & railroad intersection	1300	155	12	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
18 200m NW of Ferry St. & railroad intersection	1345	155	12	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
19 200m NE of STPA building	1400	155	20	Southeast	Upwind	Background	No observations seen to affect sampling integrity
20 200m NW of Ferry St. & railroad intersection	1400	155	14	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
21 200m NW of Ferry St. & railroad intersection	1445	155	18	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity
22 200m NE of STPA building	1500	155	26	Southeast	Upwind	Background	No observations seen to affect sampling integrity
23 200m NW of Ferry St. & railroad intersection	1500	155	18	Southeast	Downwind	Machines moving material	No observations seen to effect 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
24 200m NW of Ferry St. & railroad intersection	1530	155	16	Southeast	Downwind	Machines moving material	No observations seen to effect sampling integrity

Comparison of Downwind Daily Results for Dust Budget

Location	Duration	Dust Budget Value ($\mu\text{g}/\text{m}^3$)	Dust Budget Exceedance Value ($\mu\text{g}/\text{m}^3$)
200m NW of Ferry St. & railroad intersection	0800 to 0859	7	990
200m NW of Ferry St. & railroad intersection	0900 to 0959	17	990
200m NW of Ferry St. & railroad intersection	1000 to 1059	27	990
200m NW of Ferry St. & railroad intersection	1100 to 1159	35	990
200m NW of Ferry St. & railroad intersection	1200 to 1259	46	990
200m NW of Ferry St. & railroad intersection	1300 to 1359	58	990
200m NW of Ferry St. & railroad intersection	1400 to 1459	74	990
200m NW of Ferry St. & railroad intersection	1500 to 1559	91	990

VOC Monitoring

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