

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1243-09
FROM	Dianne Theriault	SHIFT:	1130 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	15 th December, 2008		Terry Smith, ALL-TECH
		STPA NO:	TP2-0071

**SUBJECT: 13th December, 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 13th of December, 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:
- Mainly cloudy with periods of rain
- Temperature: approximately 2°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 1130 and sampling began at 1200. 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 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
13th December, 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 400m N of Ferry and railway tracks	1200	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 20m S of Inglis and Spar Intersection	1200	155	4	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
3 20m S of Inglis and Spar Intersection	1245	155	4	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
4 400m N of Ferry and railway tracks	1300	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 20m S of Inglis and Spar Intersection	1300	155	2	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
6 20m S of Inglis and Spar Intersection	1330	155	0	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
7 400m N of Ferry and railway tracks	1400	155	3	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 20m S of Inglis and Spar Intersection	1400	155	4	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
9 20m S of Inglis and Spar Intersection	1445	155	6	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
10 400m N of Ferry and railway tracks	1500	155	8	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 20m S of Inglis and Spar Intersection	1500	155	8	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
12 20m S of Inglis and Spar Intersection	1545	155	7	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
13 400m N of Ferry and railway tracks	1600	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 20m S of Inglis and Spar Intersection	1600	155	7	Northwest	Downwind	Personnel working on-site	No observations seen to effect sampling integrity
15 20m S of Inglis and Spar Intersection	1645	155	4	Northwest	Downwind	Personnel working 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 ($\mu\text{g}/\text{m}^3$)
20m S of Inglis and Spar Intersection	1200 to 1259	4	990
20m S of Inglis and Spar Intersection	1300 to 1359	5	990
20m S of Inglis and Spar Intersection	1400 to 1459	10	990
20m S of Inglis and Spar Intersection	1500 to 1559	18	990
20m S of Inglis and Spar Intersection	1600 to 1659	24	990

VOC Monitoring

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