

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1208-14
FROM	Dianne Theriault	SHIFT:	1000 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	22 nd October, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0039

**SUBJECT: 21st October, 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 21st of October, 2008. Colin MacIsaac 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, high winds, morning rain
- Temperature: approximately 10°C
- Wind Direction: Northeast

Comments: *ALL-TECH was on-Site at 1000 and sampling began as soon as weather conditions were within instrument specifications. Air monitoring was performed during EarthTech's construction activities.*

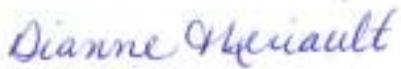
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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
21st October, 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 60m E of Ferry St. Bridge	1230	155	24	Northeast	Downwind	Excavators in operation	No observations seen to affect sampling integrity
2 50m N of Inglis and Sparr Intersection	1250	155	15	Northeast	Upwind	Background	No observations seen to effect sampling integrity
3 60m E of Ferry St. Bridge	1300	155	26	Northeast	Downwind	Excavators in operation	No observations seen to effect sampling integrity
4 60m E of Ferry St. Bridge	1340	155	17	Northeast	Downwind	Excavators in operation	No observations seen to affect sampling integrity
5 50m N of Inglis and Sparr Intersection	1400	155	18	Northeast	Upwind	Background	No observations seen to effect sampling integrity
6 60m E of Ferry St. Bridge	1400	155	28	Northeast	Downwind	Excavators in operation	No observations seen to effect sampling integrity
7 60m E of Ferry St. Bridge	1445	155	48	Northeast	Downwind	Excavators in operation	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 50m N of Inglis and Sparr Intersection	1500	155	15	Northeast	Upwind	Background	No observations seen to effect sampling integrity
9 60m E of Ferry St. Bridge	1500	155	14	Northeast	Downwind	No activity observed on site	No observations seen to effect sampling integrity
10 60m E of Ferry St. Bridge	1545	155	24	Northeast	Downwind	Excavators in operation	No observations seen to affect sampling integrity
11 50m N of Inglis and Sparr Intersection	1600	155	14	Northeast	Upwind	Background	No observations seen to effect sampling integrity
12 60m E of Ferry St. Bridge	1600	155	26	Northeast	Downwind	Excavators in operation	No observations seen to effect sampling integrity
13 60m E of Ferry St. Bridge	1630	155	15	Northeast	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 ($\mu\text{g}/\text{m}^3$)
60m E of Ferry St. Bridge	1300 to 1359	22	990
60m E of Ferry St. Bridge	1400 to 1459	56	990
60m E of Ferry St. Bridge	1500 to 1559	76	990
60m E of Ferry St. Bridge	1600 to 1659	97	990

VOC Monitoring

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