

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1225-10
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	18 th November, 2008	STPA NO.	TP2-0054

**SUBJECT: 17th 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 17th of November, 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:

- Mainly Sunny
- Temperature: approximately 9°C
- Wind Direction: 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 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
17th 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 15m S of Ferry and Railway tracks intersection	0800	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 50m East of North Pond gate	0800	155	14	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
3 50m East of North Pond gate	0845	155	13	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
4 15m S of Ferry and Railway tracks intersection	0900	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 50m East of North Pond gate	0900	155	10	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
6 50m East of North Pond gate	0940	155	10	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
7 15m S of Ferry and Railway tracks intersection	1000	155	9	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
8 50m East of North Pond gate	1000	155	9	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
9 50m East of North Pond gate	1045	155	8	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
10 15m S of Ferry and Railway tracks intersection	1100	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 50m East of North Pond gate	1100	155	9	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
12 50m East of North Pond gate	1130	155	9	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
13 15m S of Ferry and Railway tracks intersection	1200	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 30m East of North Pond gate	1200	155	7	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 30m East of North Pond gate	1230	155	9	Southwest	Downwind	Excavators in operation	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 15m S of Ferry and Railway tracks intersection	1300	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 30m East of North Pond gate	1300	155	7	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
18 30m East of North Pond gate	1330	155	9	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
19 15m S of Ferry and Railway tracks intersection	1400	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 30m East of North Pond gate	1400	155	12	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
21 30m East of North Pond gate	1445	155	12	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
22 15m S of Ferry and Railway tracks intersection	1500	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 30m East of North Pond gate	1500	155	6	Southwest	Downwind	Excavators in operation	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
24 30m East of North Pond gate	1545	155	6	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
25 15m S of Ferry and Railway tracks intersection	1600	155	8	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 30m East of North Pond gate	1600	155	6	Southwest	Downwind	Excavators in operation	No observations seen to effect sampling integrity
27 30m East of North Pond gate	1645	155	6	Southwest	Downwind	No activity observed 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 ($\mu\text{g}/\text{m}^3$)
50m East of North Pond gate	0800 to 0859	14	990
50m East of North Pond gate	0900 to 0959	24	990
50m East of North Pond gate	1000 to 1059	33	990
50m East of North Pond gate	1100 to 1159	42	990
30m East of North Pond gate	1200 to 1259	50	990
30m East of North Pond gate	1300 to 1359	58	990
30m East of North Pond gate	1400 to 1459	70	990
30m East of North Pond gate	1500 to 1559	76	990
30m East of North Pond gate	1600 to 1659	82	990

VOC Monitoring

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