

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-12
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 September, 2008	STPA NO.	TP2-0016

**SUBJECT: 17th September, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Materials Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 17th of September, 2008. Colin MacIsaac and Tyler Rowe of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Sunny with cloudy periods
- Temperature: approximately 20°C
- Wind Direction: Northwest 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.*

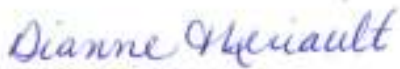
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Colin MacIsaac 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 – Materials Processing Facility
17th September, 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 North of Spar Road, Railway property	0815	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 40m North of Spar Road, Inglis Street	0815	155	10	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 20m North of Spar Road, Inglis Street	0840	155	11	Northwest	Downwind	Excavation of material	No observations seen to effect sampling integrity
4 200m North of Spar Road, Railway property	0900	155	8	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 20m North of Spar Road, Inglis Street	0900	155	16	Northwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
6 50m Southeast of North Pond main gate	0940	155	18	Southwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
7 10m East of Intercolonial fixed station	1000	155	11	Southwest	Upwind	Background	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
8 50m Southeast of North Pond main gate	1000	155	12	Southwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
9 50m Southeast of North Pond main gate	1015	155	25	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
10 10m East of Intercolonial fixed station	1100	155	15	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 50m Southeast of North Pond main gate	1100	155	28	Southwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
12 50m Southeast of North Pond main gate	1120	155	28	Southwest	Downwind	Excavation of material	No observations seen to effect sampling integrity
13 10m East of Intercolonial fixed station	1200	155	14	Southwest	Upwind	Background	No observations seen to effect sampling integrity
14 50m Southeast of North Pond main gate	1200	155	21	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 50m Southeast of North Pond main gate	1245	155	20	Southwest	Downwind	Excavation of 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
16 10m East of Intercolonial fixed station	1300	155	13	Southwest	Upwind	Background	No observations seen to effect sampling integrity
17 50m Southeast of North Pond main gate	1300	155	22	Southwest	Downwind	Excavation of material	No observations seen to effect sampling integrity
18 50m Southeast of North Pond main gate	1345	155	22	Southwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
19 10m East of Intercolonial fixed station	1400	155	10	Southwest	Upwind	Background	No observations seen to effect sampling integrity
20 50m Southeast of North Pond main gate	1400	155	24	Southwest	Downwind	Excavation of material	No observations seen to effect sampling integrity
21 50m Southeast of North Pond main gate	1445	155	21	Southwest	Downwind	Excavation of material	No observations seen to affect sampling integrity
22 10m East of Intercolonial fixed station	1500	155	9	Southwest	Upwind	Background	No observations seen to effect sampling integrity
23 50m Southeast of North Pond main gate	1500	155	13	Southwest	Downwind	No activity observed on site	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 50m Southeast of North Pond main gate	1545	155	25	Southwest	Downwind	Excavation of material	No observations seen to effect sampling integrity
25 10m East of Intercolonial fixed station	1600	155	22	Southwest	Upwind	Background	No observations seen to effect sampling integrity
26 50m Southeast of North Pond main gate	1600	155	12	Southwest	Downwind	No activity observed	No observations seen to effect sampling integrity
27 50m Southeast of North Pond main gate	1645	155	10	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 ($\mu\text{g}/\text{m}^3$)
40m North of Spar Road, Inglis Street	0800 to 0859	11	990
20m North of Spar Road, Inglis Street	0900 to 0959	28	990
50m Southeast of North Pond main gate	1000 to 1059	47	990
50m Southeast of North Pond main gate	1100 to 1159	75	990
50m Southeast of North Pond main gate	1200 to 1259	96	990
50m Southeast of North Pond main gate	1300 to 1359	1118	990
50m Southeast of North Pond main gate	1400 to 1459	141	990
50m Southeast of North Pond main gate	1500 to 1559	160	990
50m Southeast of North Pond main gate	1600 to 1659	171	990

VOC Monitoring

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