

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1189-02
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	27 th August, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0002

**SUBJECT: 26th August, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – TP2 Material Handling Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 26th of August, 2008. Kelly Morrison 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:

- Overcast
- Temperature: approximately 20°C
- Wind Direction: Southwest to West

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.*

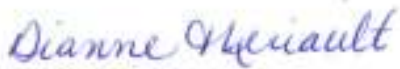
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Tyler Rowe 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 – TP2 Material Handling Facility
26th August, 2008

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
1 20m Southeast of Ferry Street and Walker Street intersection	0805	155	28	Southwest	Upwind	Background	No observations seen to effect sampling integrity
2 50m East of North Pond main gate	0805	155	28	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
3 50m East of North Pond main gate	0830	155	28	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
4 20m Southeast of Ferry Street and Walker Street intersection	0900	155	27	Southwest	Upwind	Background	No observations seen to effect sampling integrity
5 50m East of North Pond main gate	0900	155	27	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
6 50m East of North Pond main gate	0940	155	32	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
7 20m Southeast of Ferry Street and Walker Street intersection	1000	155	26	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 East of North Pond main gate	1000	155	27	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
9 50m East of North Pond main gate	1020	155	29	Southwest	Downwind	Bobcat operating	No observations seen to effect sampling integrity
10 20m Southeast of Ferry Street and Walker Street intersection	1100	155	33	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 50m East of North Pond main gate	1100	155	33	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
12 50m East of North Pond main gate	1135	155	28	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
13 20m Southeast of Ferry Street and Walker Street intersection	1200	155	26	Southwest	Upwind	Background	No observations seen to effect sampling integrity
14 50m East of North Pond main gate	1200	155	22	Southwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
15 50m East of North Pond main gate	1215	155	21	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
16 20m Southeast of Ferry Street and Walker Street intersection	1300	155	19	Southwest	Upwind	Background	No observations seen to effect sampling integrity
17 50m East of North Pond main gate	1300	155	17	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
18 50m East of North Pond main gate	1325	155	17	Southwest	Downwind	Workers erecting fence	No observations seen to effect sampling integrity
19 Walker Street, 25m North of Ferry Street	1400	155	18	West	Upwind	Background	No observations seen to effect sampling integrity
20 Inglis Street, 60m North of Spar Road	1400	155	21	West	Downwind	Bobcat operating	No observations seen to effect sampling integrity
21 Inglis Street, 60m North of Spar Road	1440	155	18	West	Downwind	Workers using hand tools	No observations seen to effect sampling integrity
22 Walker Street, 25m North of Ferry Street	1500	155	18	West	Upwind	Background	No observations seen to effect sampling integrity
23 Inglis Street, 60m North of Spar Road	1500	155	18	West	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 Inglis Street, 60m North of Spar Road	1530	155	19	West	Downwind	Bobcat operating	No observations seen to effect sampling integrity
25 Walker Street, 25m North of Ferry Street	1600	155	20	West	Upwind	Background	No observations seen to effect sampling integrity
26 Inglis Street, 60m North of Spar Road	1600	155	19	West	Downwind	Workers using hand tools	No observations seen to effect sampling integrity
27 Inglis Street, 60m North of Spar Road	1645	155	20	West	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 main gate	0800 to 0859	28	990
50m East of North Pond main gate	0900 to 0959	58	990
50m East of North Pond main gate	1000 to 1059	86	990
50m East of North Pond main gate	1100 to 1159	117	990
50m East of North Pond main gate	1200 to 1259	139	990
50m East of North Pond main gate	1300 to 1359	156	990
Inglis Street, 60m North of Spar Road	1400 to 1459	176	990
Inglis Street, 60m North of Spar Road	1500 to 1559	195	990
Inglis Street, 60m North of Spar Road	1600 to 1659	215	990

VOC Monitoring

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