

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1173-15
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	26 th August, 2008		Terry Smith, ALL-TECH
		STPA NO.	PS-0040

**SUBJECT: 25th August, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – North Pond Pilot Study
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 25th of August, 2008. Reg Peters and Donald MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Overcast, showers
- Temperature: approximately 22°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on-Site at 0730, but sampling remained on standby until precipitation ended at 1020. Heavy precipitation halted air monitoring between 1330 and 1500. Air monitoring was performed during EarthTech's construction activities.*

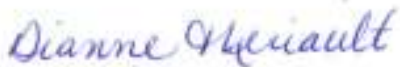
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Donald 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 – North Pond Pilot Study
25th August, 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 North of North Pond Main Gate	1000	155	22	Southwest	Downwind	No activity observed on-site	No observations seen to affect sampling integrity
2 20m South of Walker and Ferry Street Intersection	1020	155	32	Southwest	Upwind	Background	No observations seen to affect sampling integrity
3 15m North of North Pond Main Gate	1035	155	9	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
4 20m South of Walker and Ferry Street Intersection	1100	155	13	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 15m North of North Pond Main Gate	1100	155	13	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
6 15m North of North Pond Main Gate	1130	155	13	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
7 20m South of Walker and Ferry Street Intersection	1200	155	10	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 15m North of North Pond Main Gate	1200	155	12	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
9 15m North of North Pond Main Gate	1230	155	11	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
10 20m South of Walker and Ferry Street Intersection	1300	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 15m North of North Pond Main Gate	1300	155	7	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
12 20m South of Walker and Ferry Street Intersection	1445	155	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
13 20m South of Walker and Ferry Street Intersection	1500	155	2	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 15m North of North Pond Main Gate	1500	155	4	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
15 15m North of North Pond Main Gate	1520	155	4	Southwest	Downwind	Crane Operating	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 20m South of Walker and Ferry Street Intersection	1600	155	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 15m North of North Pond Main Gate	1600	155	6	Southwest	Downwind	Crane Operating	No observations seen to affect sampling integrity
18 15m North of North Pond Main Gate	1645	155	7	Southwest	Downwind	Crane Operating	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 ($\mu\text{g}/\text{m}^3$)
15m North of North Pond Main Gate	1000 to 1059	16	990
15m North of North Pond Main Gate	1100 to 1159	29	990
15m North of North Pond Main Gate	1200 to 1259	41	990
15m North of North Pond Main Gate	1300 to 1359	48	990
15m North of North Pond Main Gate	1500 to 1559	52	990
15m North of North Pond Main Gate	1600 to 1659	59	990

VOC Monitoring

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