

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1173-02
FROM	Dianne Theriault	SHIFT:	1200 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	6 th August, 2008		Terry Smith, ALL-TECH
		STPA NO.	PS-0027

**SUBJECT: 6th 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 6th 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, brief periods of showers
- Temperature: approximately 19°C
- Wind Direction: Northeast

Comments: *ALL-TECH was on-Site at 1200 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities.*

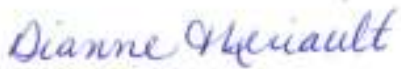
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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
6th 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 40m Southeast of Walker & Ferry Street Intersection	1230	155	4	Northeast	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
2 35m Northeast of North Pond Gate	1245	155	21	Northeast	Upwind	Background	No observations seen to effect sampling integrity
3 40m Southeast of Walker & Ferry Street Intersection	1245	155	1	Northeast	Downwind	Working On Structure	No observations seen to effect sampling integrity
4 35m Northeast of North Pond Gate	1300	155	24	Northeast	Upwind	Background	No observations seen to effect sampling integrity
5 40m Southeast of Walker & Ferry Street Intersection	1300	155	2	Northeast	Downwind	Working On Structure	No observations seen to effect sampling integrity
6 40m Southeast of Walker & Ferry Street Intersection	1330	155	1	Northeast	Downwind	Working On Structure	No observations seen to effect sampling integrity
7 35m Northeast of North Pond Gate	1400	155	8	Northeast	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 40m Southeast of Walker & Ferry Street Intersection	1400	155	1	Northeast	Downwind	Crane Operating	No observations seen to effect sampling integrity
9 40m Southeast of Walker & Ferry Street Intersection	1445	155	1	Northeast	Downwind	Crane Operating	No observations seen to effect sampling integrity
10 35m Northeast of North Pond Gate	1500	155	4	Northeast	Upwind	Background	No observations seen to effect sampling integrity
11 40m Southeast of Walker & Ferry Street Intersection	1500	155	1	Northeast	Downwind	Crane Operating	No observations seen to effect sampling integrity
12 40m Southeast of Walker & Ferry Street Intersection	1515	155	1	Northeast	Downwind	Crane Operating	No observations seen to effect sampling integrity
13 35m Northeast of North Pond Gate	1600	155	12	Northeast	Upwind	Background	Front loader dumping upwind of sampler
14 40m Southeast of Walker & Ferry Street Intersection	1600	155	0	Northeast	Downwind	Crane Operating	No observations seen to effect sampling integrity
15 40m Southeast of Walker & Ferry Street Intersection	1645	155	1	Northeast	Downwind	No activity Observed	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 Southeast of Walker & Ferry Street Intersection	1200 to 1259	3	990
40m Southeast of Walker & Ferry Street Intersection	1300 to 1359	5	990
40m Southeast of Walker & Ferry Street Intersection	1400 to 1459	6	990
40m Southeast of Walker & Ferry Street Intersection	1500 to 1559	7	990
40m Southeast of Walker & Ferry Street Intersection	1600 to 1659	8	990

VOC Monitoring

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