

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1128-01
FROM	Grant Harrigan	SHIFT:	1120 to 1715
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	6 th May, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0133

**SUBJECT: 2nd May 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – South Pond Pilot Test
FINAL REPORT**

Attached is a summary of real-time particulate (as PM₁₀) results for air monitoring performed on the 2nd of May, 2008. Donald 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:

- Overcast
- Temperature: 6°C
- Wind Direction: East

Comments: *ALL-TECH was on-Site at 1120 and sampling began as soon as weather would allow. Air monitoring was performed during EarthTech's construction activities.*

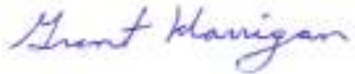
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

All downwind and upwind measurements of Total Volatile Organic Compounds (TVOC) were well 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), TVOC sampling is halted and resumes after the precipitation has ended.

This report has been prepared by Tyler Rowe and reviewed by Peter Ibrahim. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Grant Harrigan, 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 – South Pond Pilot Test
2nd May, 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 20m East of cooling pond security gate	1120	155	27	East	Upwind	Background	No observations seen to effect sampling integrity
2 50m South of former Walker Street train station	1120	155	28	East	Downwind	Dump truck operating	No observations seen to effect sampling integrity
3 20m East of cooling pond security gate	1200	155	27	East	Upwind	Background	No observations seen to effect sampling integrity
4 50m South of former Walker Street train station	1200	155	27	East	Downwind	No activity	No observations seen to effect sampling integrity
5 50m South of former Walker Street train station	1244	155	21	East	Downwind	No activity	No observations seen to effect sampling integrity
6 20m East of cooling pond security gate	1300	155	18	East	Upwind	Background	No observations seen to effect sampling integrity
7 50m South of former Walker Street train station	1300	155	20	East	Downwind	No activity	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 South of former Walker Street train station	1340	155	20	East	Downwind	No activity	No observations seen to effect sampling integrity
9 20m East of cooling pond security gate	1400	155	18	East	Upwind	Background	No observations seen to effect sampling integrity
10 50m South of former Walker Street train station	1400	155	17	East	Downwind	Excavator operating	No observations seen to effect sampling integrity
11 50m South of former Walker Street train station	1430	155	18	East	Downwind	No activity	No observations seen to effect sampling integrity
12 20m East of cooling pond security gate	1500	155	21	East	Upwind	Background	No observations seen to effect sampling integrity
13 50m South of former Walker Street train station	1500	155	23	East	Downwind	No activity	No observations seen to effect sampling integrity
14 50m South of former Walker Street train station	1530	155	22	East	Downwind	No activity	No observations seen to effect sampling integrity
15 20m East of cooling pond security gate	1600	155	24	East	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
16 50m South of former Walker Street train station	1600	155	18	East	Downwind	No activity	No observations seen to effect sampling integrity
17 50m South of former Walker Street train station	1630	155	28	East	Downwind	No activity	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 South of former Walker Street train station	1100 to 1159	28	990
50m South of former Walker Street train station	1200 to 1259	52	990
50m South of former Walker Street train station	1300 to 1359	72	990
50m South of former Walker Street train station	1400 to 1459	90	990
50m South of former Walker Street train station	1500 to 1559	113	990
50m South of former Walker Street train station	1600 to 1659	136	990

VOC Monitoring

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