

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1074-05
FROM	Grant Harrigan	SHIFT:	1430 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	6 th February, 2008		Terry Smith, ALL-TECH
		STPA NO.	CP-0062

**SUBJECT: 5th February, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Cooling Pond
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 5th of February, 2008. Peter Ibrahim and Grant Harrigan of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities on the asphalt pad.

Weather conditions on the day of sampling:

- Overcast with sunny periods.
- Temperature: approximately -3°C (data unavailable from Environment Canada)
- Wind Direction: North to West to South

Comments: *ALL-TECH was on-Site at 1430 when activities were observed on the asphalt pad and remained on-Site until 1700. Air monitoring was performed during EarthTech's construction activities.*


All downwind and upwind measurements of PM₁₀ were well 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 Grant Harrigan and reviewed by Dianne Theriault. 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 – Cooling Pond
5th February, 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 10 m North of Inglis Street and Terminal Road intersection	1500	155	9	South	Upwind	Background	No observations seen to effect sampling integrity
2 100m East of Ferry Street bridge	1501	155	21	South	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
3 100m East of Ferry Street bridge	1516	155	15	South	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
4 20 m North of Acadian Lines bus terminal	1600	155	8	Southwest	Upwind	Background	No observations seen to effect sampling integrity
5 10m North of Spar Road and Ferry Street intersection	1601	155	18	South	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
6 10m North of Spar Road and Ferry Street intersection	1620	155	17	South	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 ($\mu\text{g}/\text{m}^3$)
100m East of Ferry Street bridge	1501 to 1531	18	990
10m North of Spar Road and Ferry Street intersection	1601 to 1635	18	990

VOC Monitoring

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