

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1053-23
FROM	Grant Harrigan	SHIFT:	1530 to 1815
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	30 th January, 2008		Terry Smith, ALL-TECH
		STPANO.	CP-0056

**SUBJECT: 29th January, 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 29th of January, 2008. Grant Harrigan and Dianne Theriault of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities on the asphalt pad North of the Cooling Pond.

Weather conditions on the day of sampling:

- Overcast and light fog
- Temperature: approximately 4°C (data unavailable from Environment Canada)
- Wind Direction: Northwest to Southeast

Comments: *A dozer and an excavator were observed moving material on the asphalt pad North of the Cooling Pond at 1530. ALL-TECH was on-Site to perform air monitoring at 1600. Air sampling continued until the end of the day.*

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 was halted and resumed after the precipitation had ended.

This report has been prepared by Dianne Theriault and reviewed by Grant Harrigan. 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:

Shawn Bernon shawn@tarpondscleanup.ca, Wilfred Kaiser wilfred@tarpondscleanup.ca, Nancy LeDrew nancy@tarpondscleanup.ca, Trish Magliaro trish@tarpondscleanup.ca, Terry Smith tsmith@toalltech.com, Phyllis Low pjlow@toalltech.com, Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@croworld.com, Darren Lawless dlawless@toalltech.com, Kevin Mac Pherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Cooling Pond
29th January, 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 South of Walker Street and Ferry Street intersection	1540	155	22	Northwest	Upwind	Background	No observations seen to effect sampling integrity
2 50m North of STPA building	1610	155	29	Northwest	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
3 50m North of STPA building	1625	155	24	Northwest	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
4 20m South of Walker Street and Ferry Street intersection	1635	155	18	Northwest	Upwind	Background	No observations seen to effect sampling integrity
5 100m West of Ferry Street and Inglis Street intersection	1710	155	48	Southeast	Downwind	No activity observed on-Site	No observations seen to effect sampling integrity
6 100m West of Ferry Street and Inglis Street intersection	1725	155	27	Southeast	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 North of STPA building	1610 to 1640	27	990
100m West of Ferry Street and Inglis Street intersection	1710 to 1740	65	990

VOC Monitoring

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

*P.I.D. was used for all samples and was below detection level.