

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1234-01
FROM	Dianne Theriault	SHIFT:	0730 to 1745
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	15 th November, 2008		Terry Smith, ALL-TECH
		STPA NO.	COCW-0001

**SUBJECT: 14th November, 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 14th of November, 2008. Tyler Rowe and Colin MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly Sunny
- Temperature: approximately 7°C
- Wind Direction: Southeast to South

Comments: *ALL-TECH was on-Site at 0730 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 Tyler Rowe 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 – Coke Ovens Vertical Cut Off Walls
14th November, 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 60m East of Victoria road bridge along railway	0900	155	14	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 Spar Road, 50m East of Millcreek gate	0900	155	45	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
3 Spar Road, 50m East of Millcreek gate	0945	155	9	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
4 60m East of Victoria road bridge along railway	1000	155	8	Southeast	Upwind	Background	No observations seen to affect sampling integrity
5 Spar Road, 50m East of Millcreek gate	1000	155	10	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
6 Spar Road, 50m East of Millcreek gate	1030	155	7	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 60m East of Victoria road bridge along railway	1100	155	6	Southeast	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 Spar Road, 50m East of Millcreek gate	1100	155	7	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 Spar Road, 50m East of Millcreek gate	1145	155	9	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 60m East of Victoria road bridge along railway	1200	155	7	Southeast	Upwind	Background	No observations seen to affect sampling integrity
11 Spar Road, 50m East of Millcreek gate	1200	155	8	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 Spar Road, 50m East of Millcreek gate	1230	155	8	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 60m East of Victoria road bridge along railway	1300	155	6	Southeast	Upwind	Background	No observations seen to affect sampling integrity
14 Spar Road, 50m East of Millcreek gate	1300	155	7	Southeast	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 Spar Road, 60m East of Millcreek gate	1345	155	8	South	Downwind	Excavator operating	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 20m East of Victoria road bridge along railway	1400	155	6	South	Upwind	Background	No observations seen to affect sampling integrity
17 Spar Road, 60m East of Millcreek gate	1400	155	6	South	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 20m East of Victoria road bridge along railway	1500	155	6	South	Upwind	Background	No observations seen to affect sampling integrity
19 Spar Road, 60m East of Millcreek gate	1500	155	8	South	Downwind	Excavator operating	No observations seen to effect sampling integrity
20 Spar Road, 60m East of Millcreek gate	1545	155	6	South	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 20m East of Victoria road bridge along railway	1600	155	8	South	Upwind	Background	No observations seen to affect sampling integrity
22 Spar Road, 60m East of Millcreek gate	1600	155	7	South	Downwind	Excavator operating	No observations seen to effect sampling integrity
23 Spar Road, 60m East of Millcreek gate	1630	155	7	South	Downwind	Excavator operating	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
24 20m East of Victoria road bridge along railway	1700	155	6	South	Upwind	Background	No observations seen to affect sampling integrity
25 Spar Road, 60m East of Millcreek gate	1700	155	7	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 ($\mu\text{g}/\text{m}^3$)
Spar Road, 50m East of Millcreek gate	0900 to 0959	24	990
Spar Road, 50m East of Millcreek gate	1000 to 1059	33	990
Spar Road, 50m East of Millcreek gate	1100 to 1159	41	990
Spar Road, 50m East of Millcreek gate	1200 to 1259	49	990
Spar Road, 50m/60m East of Millcreek gate	1300 to 1359	57	990
Spar Road, 60m East of Millcreek gate	1400 to 1459	63	990
Spar Road, 60m East of Millcreek gate	1500 to 1559	70	990
Spar Road, 60m East of Millcreek gate	1600 to 1659	77	990
Spar Road, 60m East of Millcreek gate	1700 to 1759	84	990

VOC Monitoring

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