

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1244-15
FROM	Dianne Theriault	SHIFT:	0630 to 1630
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	19 th December, 2008	STPA NO.	COCW-0030

**SUBJECT: 18th December, 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 18th of December, 2008. Alison Giovannetti 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:

- Cloudy with snow flurries
- Temperature: approximately -1°C
- Wind Direction: West to Northwest

Comments: *ALL-TECH was on-Site at 0630 hours and sampling began as soon as there was site activity, but was later put on standby at 1400 hours and cancelled for the day at 1630 hours due to ongoing precipitation. Air monitoring was performed during AECOM'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 Alison Giovannetti 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 Cutoff Walls
18th December, 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
1 150 m South of Spar and Spar Rd. ext intersection	0700	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
2 Railroad tracks, 25m South of Spar Rd.	0700	155	3	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
3 Railroad tracks, 25m South of Spar Rd.	0735	155	6	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
4 150 m South Spar and Spar Rd. ext intersection	0800	155	1	West	Upwind	Background	No observations seen to affect sampling integrity
5 Railroad tracks, 25m South of Spar Rd.	0800	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
6 Railroad tracks, 25m South of Spar Rd.	0815	155	4	West	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity

Sydney Tar Ponds Agency - Ambient Air Monitoring Program
 Real-time Air Monitoring Daily Report

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
7 150 m South Spar and Spar Rd. ext intersection	0900	155	0	West	Upwind	Background	No observations seen to affect sampling integrity
8 Railroad tracks, 50m South of Spar Rd.	0900	155	9	West	Downwind	Excavator operating	No observations seen to affect sampling integrity
9 Railroad tracks, 50m South of Spar Rd.	0920	155	4	West	Downwind	Excavator operating	No observations seen to affect sampling integrity
10 5m Northwest of Spar and Spar Rd. intersection	1000	155	-1	Northwest	Upwind	Background	Re-zeroed DustTrak due to negative samples
11 Railroad tracks, 60m South of Spar Rd.	1000	155	7	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
12 Railroad tracks, 60m South of Spar Rd.	1025	155	5	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
13 5m Northwest of Spar and Spar Rd. intersection	1100	155	5	Northwest	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
14 Railroad tracks, 60m South of Spar Rd.	1100	155	7	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
15 15m North of Coke Ovens Security Trailer	1145	155	5	Northwest	Downwind	Activity not visible from sample location	No observations seen to affect sampling integrity
16 5m Northwest of Spar and Spar Rd. intersection	1200	155	6	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 15m North of Coke Ovens Security Trailer	1200	155	5	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
18 15m North of Coke Ovens Security Trailer	1240	155	1	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
19 5m Northwest of Spar and Spar Rd. intersection	1300	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 15m North of Coke Ovens Security Trailer	1300	155	1	Northwest	Downwind	Excavator operating	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
21 15m North of Coke Ovens Security Trailer	1320	155	2	Northwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
22 5m Northwest of Spar and Spar Rd. intersection	1400	155	3	Northwest	Upwind	Background	No observations seen to affect sampling integrity
23 15m North of Coke Ovens Security Trailer	1400	155	3	Northwest	Downwind	Excavator operating	No observations seen to affect 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 ($\mu\text{g}/\text{m}^3$)
Railroad tracks, 25m South of Spar Rd.	0700 to 0759	5	990
Railroad tracks, 25m South of Spar Rd.	0800 to 0859	9	990
Railroad tracks, 50m South of Spar Rd.	0900 to 0959	16	990
Railroad tracks, 60m South of Spar Rd.	1000 to 1059	22	990
Railroad tracks, 50m South of Spar Rd./15m North of Coke Ovens Security Trailer	1100 to 1159	28	990
15m North of Coke Ovens Security Trailer	1200 to 1259	31	990
15m North of Coke Ovens Security Trailer	1300 to 1359	33	990
15m North of Coke Ovens Security Trailer	1400 to 1459	34	990

VOC Monitoring

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