

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1075-06
FROM	Grant Harrigan	SHIFT:	0630 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	11 th February, 2008		Terry Smith, ALL-TECH
		STPA NO.	COB-0033

**SUBJECT: 8th February 2008, Revised Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Brook
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 8th of February, 2007. Trevor Rowe and Tyler Rowe, of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring for activities on the Coke Ovens Brook.

Weather conditions on the day of sampling:

- Overcast, flurries
- Temperature: -2°C
- Wind Direction: East

Comments: *ALL-TECH was on-Site at 0630 and sampling began as soon as there was Site activity. Air monitoring was performed during CBRM activities on the Coke Ovens Brook.*

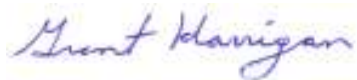
All downwind and upwind measurements of PM₁₀ were well below the established Site Action Level for this parameter of 155 µg/m³.

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 Tyler Rowe and reviewed by Darren Lawless. 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 – Coke Ovens Brook
8th February, 2008

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Location of Activity	Observations that may affect sample
1 10m South of Coke Ovens Brook main gate	0720	155	8	East	Upwind	Background	No observations seen to effect sampling integrity
2 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0720	155	6	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
3 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0735	155	3	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
4 10m South of Coke Ovens Brook main gate	0800	155	13	East	Upwind	Background	No observations seen to effect sampling integrity
5 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0800	155	4	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
6 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0815	155	2	East	Downwind	Excavator moving material	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	Location of Activity	Observations that may affect sample
7 10m South of Coke Ovens Brook main gate	0900	155	5	East	Upwind	Background	No observations seen to effect sampling integrity
8 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0900	155	-1	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
9 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0915	155	-3	East	Downwind	Excavator moving material	Calibrated equipment
10 10m South of Coke Ovens Brook main gate	1000	155	7	East	Upwind	Background	No observations seen to effect sampling integrity
11 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1045	155	20	East	Downwind	Excavator moving material	Snorkel not properly fitted to enclosure
12 10m South of Coke Ovens Brook main gate	1100	155	2	East	Upwind	Background	No observations seen to effect sampling integrity
13 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1100	155	4	East	Downwind	Excavator moving material	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	Location of Activity	Observations that may affect sample
14 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1115	155	3	East	Downwind	No activity	No observations seen to effect sampling integrity
15 10m South of Coke Ovens Brook main gate	1200	155	2	East	Upwind	Background	No observations seen to effect sampling integrity
16 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1200	155	2	East	Downwind	No activity	No observations seen to effect sampling integrity
17 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1215	155	3	East	Downwind	No activity	No observations seen to effect sampling integrity
18 10m South of Coke Ovens Brook main gate	1300	155	2	East	Upwind	Background	No observations seen to effect sampling integrity
19 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1300	155	2	East	Downwind	Excavator moving material	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	Location of Activity	Observations that may affect sample
20 10m South of Coke Ovens Brook main gate	1400	155	4	East	Upwind	Background	No observations seen to effect sampling integrity
21 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1400	155	3	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
22 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1415	155	8	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
23 10m South of Coke Ovens Brook main gate	1500	155	8	East	Upwind	Background	No observations seen to effect sampling integrity
24 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1500	155	8	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
25 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1515	155	5	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
26 10m South of Coke Ovens Brook main gate	1600	155	9	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	Location of Activity	Observations that may affect sample
27 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1600	155	4	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
28 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1615	155	5	East	Downwind	Excavator moving material	No observations seen to effect sampling integrity
29 10m South of Coke Ovens Brook main gate	1645	155	4	East	Upwind	Background	No observations seen to effect sampling integrity
30 50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1645	155	3	East	Downwind	Excavator moving material	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 Spar Road, 100m West of Coke Ovens Brook main gate	0720 to 0750	5	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0800 to 0830	8	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	0900 to 0930	8	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1045 to 1115	20	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1115 to 1215	23	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1215 to 1315	26	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1315 to 1415	29	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1415 to 1515	37	990
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1515 to 1615	42	990

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Location	Duration	Dust Budget Value ($\mu\text{g}/\text{m}^3$)	Dust Budget Exceedance Value ($\mu\text{g}/\text{m}^3$)
50m South of Spar Road, 100m West of Coke Ovens Brook main gate	1615 to 1700	46	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.**