

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Peter Ibrahim
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DATE 13th June, 2008

FILE NO. S-1151-07
SHIFT: 0730 to 1700
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH
STPA NO. CO6II-0007

**SUBJECT: 12th June 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Infrastructure Investigation
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 12th of June, 2008. Tyler Rowe and Dwayne Timmons of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:
- Mainly cloudy, sunny breaks
- Temperature: approximately 18°C
- Wind Direction: West / Northwest

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 Peter Ibrahim. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Peter Ibrahim,
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 Infrastructure Investigation
12th June, 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 20m East of Victoria Road bridge	0830	155	20	West	Upwind	Background	No observations seen to effect sampling integrity
2 75m Southwest of Coke Ovens security trailer	0830	155	27	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
3 75m Southwest of Coke Ovens security trailer	0845	155	25	West	Downwind	No activity	No observations seen to effect sampling integrity
4 20m East of Victoria Road bridge	0900	155	16	West	Upwind	Background	No observations seen to effect sampling integrity
5 75m Southwest of Coke Ovens security trailer	0900	155	23	West	Downwind	No activity	No observations seen to effect sampling integrity
6 75m South of Coke Ovens security trailer	0915	155	21	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
7 20m East of Victoria Road bridge	1000	155	9	West	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	Description of Activity	Observations that may affect sample
8 75m Southwest of Coke Ovens security trailer	1000	155	39	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
9 75m Southwest of Coke Ovens security trailer	1015	155	36	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
10 20m East of Victoria Road bridge	1100	155	7	West	Upwind	Background	No observations seen to effect sampling integrity
11 75m Southwest of Coke Ovens security trailer	1100	155	13	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
12 75m Southwest of Coke Ovens security trailer	1115	155	10	West	Downwind	Excavator operating	No observations seen to effect sampling integrity
13 Frederick Street, 20m East of Lingan Road	1205	155	4	West	Upwind	Background	No observations seen to effect sampling integrity
14 170m North of Nova Towing	1200	155	10	North	Downwind	Excavator operating	No observations seen to effect sampling integrity
15 170m North of Nova Towing	1234	155	23	North	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 Frederick Street, 20m East of Lingan Road	1300	155	5	Northwest	Upwind	Background	No observations seen to effect sampling integrity
17 30m South of Coke Ovens security trailer	1300	155	22	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
18 30m South of Coke Ovens security trailer	1325	155	9	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
19 Frederick Street, 20m East of Lingan Road	1400	155	11	Northwest	Upwind	Background	No observations seen to effect sampling integrity
20 30m South of Coke Ovens security trailer	1400	155	24	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
21 30m South of Coke Ovens security trailer	1430	155	26	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
22 Frederick Street, 20m East of Lingan Road	1500	155	14	Northwest	Upwind	Background	No observations seen to effect sampling integrity
23 30m South of Coke Ovens security trailer	1500	155	23	Northwest	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 30m South of Coke Ovens security trailer	1542	155	20	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
25 Frederick Street, 20m East of Lingan Road	1600	155	11	Northwest	Upwind	Background	No observations seen to effect sampling integrity
26 30m South of Coke Ovens security trailer	1600	155	27	Northwest	Downwind	Excavator operating	No observations seen to effect sampling integrity
27 30m South of Coke Ovens security trailer	1615	155	15	Northwest	Downwind	Excavator operating	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 ($\mu\text{g}/\text{m}^3$)
75m Southwest of Coke Ovens security trailer	0800 to 0859	26	990
75m Southwest of Coke Ovens security trailer	0900 to 0959	48	990
75m Southwest of Coke Ovens security trailer	1000 to 1059	86	990
75m Southwest of Coke Ovens security trailer	1100 to 1159	98	990
170m North of Nova Towing	1200 to 1259	115	990
30m South of Coke Ovens security trailer	1300 to 1359	131	990
30m South of Coke Ovens security trailer	1400 to 1459	156	990
30m South of Coke Ovens security trailer	1500 to 1559	178	990
30m South of Coke Ovens security trailer	1600 to 1659	200	990

VOC Monitoring

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