

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1139-03
FROM	Peter Ibrahim	SHIFT:	1130 to 1815
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	4 th June, 2008		Terry Smith, ALL-TECH
		STPA NO.	COB-0041

**SUBJECT: 30th May 2008, 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 30th of May, 2008. Grant Harrigan and Peter Ibrahim of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Sunny
- Temperature: approximately 10°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on-Site at 1130 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 Peter Ibrahim and reviewed by Dianne Theriault. 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 Brook
30th May, 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 Spar Road Gate	1200	155	13	Southwest	Downwind	Excavator Digging	No observations seen to effect sampling integrity
2 200m West of Landfill	1215	155	7	Southwest	Upwind	Background	No observations seen to effect sampling integrity
3 Spar Road Gate	1220	155	8	Southwest	Downwind	Front-end Loader moving material	No observations seen to effect sampling integrity
4 Spar Road Gate	1300	155	55	Southwest	Downwind	Trucks Dumping, Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
5 Spar Road Gate	1320	155	10	Southwest	Downwind	Trucks Dumping, Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
6 200m West of Landfill	1330	155	8	Southwest	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
7 Spar Road Gate	1400	155	12	Southwest	Downwind	Trucks Dumping, Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
8 Spar Road Gate	1420	155	10	Southwest	Downwind	Trucks Dumping, Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
9 200m West of Landfill	1430	155	5	Southwest	Upwind	Background	No observations seen to effect sampling integrity
10 200m West of Landfill	1530	155	5	Southwest	Upwind	Background	No observations seen to effect sampling integrity
11 Spar Road Gate	1530	155	17	Southwest	Downwind	Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
12 Spar Road Gate	1550	155	13	Southwest	Downwind	Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
13 Spar Road Gate	1615	155	16	West	Downwind	Excavator and Front-end Loader 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
14 Spar Road Gate	1630	155	10	West	Downwind	Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
15 200m West of Landfill	1630	155	6	West	Upwind	Background	Grass Fire
16 Spar Road Gate	1700	155	35	West	Downwind	Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
17 Spar Road Gate	1715	155	7	West	Downwind	Excavator and Front-end Loader Operating	No observations seen to effect sampling integrity
18 200m West of Landfill	1730	155	2	West	Upwind	Background	No observations seen to effect sampling integrity
19 Spar Road Gate	1730	155	6	West	Downwind	Excavator and Front-end Loader 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 ($\mu\text{g}/\text{m}^3$)
Spar Road Gate	1200 to 1259	11	990
Spar Road Gate	1300 to 1359	44	990
Spar Road Gate	1400 to 1459	55	990
Spar Road Gate	1500 to 1559	70	990
Spar Road Gate	1600 to 1659	83	990
Spar Road Gate	1700 to 1759	99	990

VOC Monitoring

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