

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1348-02
FROM	Dianne Theriault	SHIFT:	0730 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	26 th June, 2009	STPA NO.	CO6-0002

**SUBJECT: 25th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Surface Cap
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 25th of June, 2009. Christopher MacNeil and Keith Neville 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 26°C
- Wind Direction: Southwest

Comments: *ALL-TECH was on-Site at 0730 hours and sampling began as soon as there was site activity. 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 180 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 Christopher MacNeil 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 – Surface Cap
 25th June, 2009**

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 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	0800	180	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	0800	180	3	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	0820	180	2	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
4 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	0900	180	5	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	0900	180	1	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
6 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	0945	180	2	Southwest	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
7 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	1000	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1000	180	4	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
9 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1035	180	4	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
10 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	1100	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1100	180	6	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
12 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1125	180	5	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
13 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	1200	180	10	Southwest	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 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1200	180	5	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1215	180	2	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	1300	180	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1300	180	1	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
18 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1335	180	2	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
19 50m East of coke ovens security trailer (N46° 08.890' W060°10.124')	1400	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1400	180	3	Southwest	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 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1420	180	4	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
22 25m East of coke ovens security trailer (N46° 08.875' W060°10.142')	1500	180	7	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1500	180	3	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
24 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1520	180	4	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
25 25m East of coke ovens security trailer (N46° 08.875' W060°10.142')	1600	180	3	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1600	180	3	Southwest	Downwind	Excavator operating	No observations seen to affect sampling integrity
27 50m Southeast of Metro Sanitation (N46 09.146' W060 09.816')	1645	180	2	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

Notes: Air sample duration for each monitoring event was 15 minutes.

Summary of Downwind PM₁₀ Action Levels

Average PM ₁₀ Concentration (µg/m ³)	Averaging Period (Hours)	Downwind Action Level (µg/m ³)
3	1	125
4	4	85
4	8	70

VOC Monitoring

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