

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1312-08
FROM	Dianne Theriault	SHIFT:	0630 to 1730
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
FAX	(902) 539-3381		
DATE	8 th May, 2009	STPA NO.	CO2-PM-0039

**SUBJECT: 7th May, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Tar Cell, Pug Mill
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 7th of May, 2009. Alison Giovannetti and Reg Peters of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly cloudy, rain
- Temperature: approximately 8°C
- Wind Direction: West

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 1530 hours and cancelled for the day at 1730 due to ongoing precipitation. Air monitoring was performed during SLR'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 – Tar Cell, Pug Mill
7th May, 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 100m Northeast of Hazco trailer	0700	155	7	West	Upwind	Background	No observations seen to affect sampling integrity
2 150m Southeast of Logistec gate on Spar Rd.	0700	155	2	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 150m Southeast of Logistec gate on Spar Rd.	0740	155	2	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 100m Northeast of Hazco trailer	0800	155	1	West	Upwind	Background	No observations seen to affect sampling integrity
5 150m Southeast of Logistec gate on Spar Rd.	0800	155	3	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 150m Southeast of Logistec gate on Spar Rd.	0820	155	0	West	Downwind	No activity observed on site	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 100m Northeast of Hazco trailer	0900	155	1	West	Upwind	Background	No observations seen to affect sampling integrity
8 150m Southeast of Logistec gate on Spar Rd.	0900	155	3	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
9 150m Southeast of Logistec gate on Spar Rd.	0945	155	13	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
10 100m Northeast of Hazco trailer	1000	155	0	West	Upwind	Background	No observations seen to affect sampling integrity
11 150m Southeast of Logistec gate on Spar Rd.	1000	155	7	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
12 150m Southeast of Logistec gate on Spar Rd.	1035	155	9	West	Downwind	Machines, mill 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
13 100m Northeast of Hazco trailer	1100	155	2	West	Upwind	Background	No observations seen to affect sampling integrity
14 150m Southeast of Logistec gate on Spar Rd.	1100	155	7	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
15 150m Southeast of Logistec gate on Spar Rd.	1140	155	15	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
16 100m Northeast of Hazco trailer	1200	155	3	West	Upwind	Background	No observations seen to affect sampling integrity
17 150m Southeast of Logistec gate on Spar Rd.	1200	155	18	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
18 150m Southeast of Logistec gate on Spar Rd.	1220	155	18	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
19 100m Northeast of Hazco trailer	1300	155	4	West	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
20 150m Southeast of Logistec gate on Spar Rd.	1300	155	8	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
21 150m Southeast of Logistec gate on Spar Rd.	1340	155	12	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
22 100m Northeast of Hazco trailer	1400	155	4	West	Upwind	Background	No observations seen to affect sampling integrity
23 150m Southeast of Logistec gate on Spar Rd.	1400	155	10	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
24 150m Southeast of Logistec gate on Spar Rd.	1415	155	13	West	Downwind	Machines, mill operating	No observations seen to affect sampling integrity
25 100m Northeast of Hazco trailer	1500	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
26 150m Southeast of Logistec gate on Spar Rd.	1500	155	9	West	Downwind	Machines, mill 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
27 150m Southeast of Logistec gate on Spar Rd.	1530	155	10	West	Downwind	Machines, mill 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 ($\mu\text{g}/\text{m}^3$)
150m Southeast of Logistec gate on Spar Rd.	0700 to 0759	2	990
150m Southeast of Logistec gate on Spar Rd.	0800 to 0859	4	990
150m Southeast of Logistec gate on Spar Rd.	0900 to 0959	12	990
150m Southeast of Logistec gate on Spar Rd.	1000 to 1059	20	990
150m Southeast of Logistec gate on Spar Rd.	1100 to 1159	31	990
150m Southeast of Logistec gate on Spar Rd.	1200 to 1259	49	990
150m Southeast of Logistec gate on Spar Rd.	1300 to 1359	59	990
150m Southeast of Logistec gate on Spar Rd.	1400 to 1459	71	990
150m Southeast of Logistec gate on Spar Rd.	1500 to 1559	81	990

VOC Monitoring

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