

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1279-18
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	31 st March, 2009	STPA NO.	TP2-0134

**SUBJECT: 30th March, 2009, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Material Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 30th of March, 2009. Shaun Dove and Tyler Rowe, of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly Cloudy with snow
- Temperature: approximately 0°C
- Wind Direction: South East

Comments: *ALL-TECH was on-Site at 0730 hours and sampling began as soon as there was site activity. Sampling was put on standby at 1600 hours due to precipitation, and was later cancelled for the day at 1730 hours. Air monitoring was performed during AECOM's construction activities.*

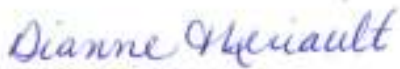
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Shaun Dove 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 – Material Processing Facility
30th March, 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 West of Inglis Street and Spar Road Intersection	0800	155	12	Southeast	Upwind	Background	No observations seen to affect sampling integrity
2 Railway Property ,400m North of Ferry Street	0800	155	10	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
3 Railway Property ,400m North of Ferry Street	0830	155	10	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
4 50m West of Inglis Street and Spar Road Intersection	0900	155	15	South East	Upwind	Background	No observations seen to affect sampling integrity
5 Railway Property ,400m North of Ferry Street	0900	155	11	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
6 Railway Property ,400m North of Ferry Street	0945	155	12	South East	Downwind	Worker activity	No observations seen to affect sampling integrity

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
7 50m West of Inglis Street and Spar Road Intersection	1000	155	27	South East	Upwind	Background	No observations seen to affect sampling integrity
8 Railway Property ,400m North of Ferry Street	1000	155	12	South East	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 Railway Property ,400m North of Ferry Street	1015	155	13	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
10 50m West of Inglis Street and Spar Road Intersection	1100	155	22	South East	Upwind	Background	No observations seen to affect sampling integrity
11 Railway Property ,400m North of Ferry Street	1100	155	13	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
12 Railway Property ,400m North of Ferry Street	1120	155	13	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
13 50m West of Inglis Street and Spar Road Intersection	1200	155	25	South East	Upwind	Background	No observations seen to affect sampling integrity

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
14 Railway Property ,400m North of Ferry Street	1200	155	15	South East	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 Railway Property ,400m North of Ferry Street	1240	155	15	South East	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 50m West of Inglis Street and Spar Road Intersection	1300	155	22	South East	Upwind	Background	No observations seen to affect sampling integrity
17 Railway Property ,400m North of Ferry Street	1300	155	15	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
18 Railway Property ,400m North of Ferry Street	1320	155	16	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
19 50m West of Inglis Street and Spar Road Intersection	1400	155	26	South East	Upwind	Background	No observations seen to affect sampling integrity
20 Railway Property ,400m North of Ferry Street	1400	155	18	South East	Downwind	Worker activity	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 Railway Property ,400m North of Ferry Street	1415	155	22	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
22 50m West of Inglis Street and Spar Road Intersection	1500	155	34	South East	Upwind	Background	No observations seen to affect sampling integrity
23 Railway Property ,400m North of Ferry Street	1500	155	22	South East	Downwind	Worker activity	No observations seen to affect sampling integrity
24 Railway Property ,400m North of Ferry Street	1530	155	25	South East	Downwind	Worker activity	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 ($\mu\text{g}/\text{m}^3$)
Railway Property, 400m North of Ferry Street	0800 to 0859	10	990
Railway Property, 400m North of Ferry Street	0900 to 0959	22	990
Railway Property, 400m North of Ferry Street	1000 to 1059	34	990
Railway Property, 400m North of Ferry Street	1100 to 1159	47	990
Railway Property, 400m North of Ferry Street	1200 to 1259	62	990
Railway Property, 400m North of Ferry Street	1300 to 1359	78	990
Railway Property, 400m North of Ferry Street	1400 to 1459	98	990
Railway Property, 400m North of Ferry Street	1500 to 1559	121	990

VOC Monitoring

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