

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1257-17
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	29 th January, 2009	STPA NO.	TP2-0095

**SUBJECT: 28th January, 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 28th of January, 2009. Colin MacIsaac and Jennifer Andrews, 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 -12°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.*

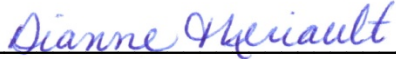
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Colin MacIsaac 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
28th January, 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 15m North of Ferry Street, Walker Street intersection	0800	155	24	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 100m North of Inglis Street and Spar Road intersection	0800	155	6	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 100m North of Inglis Street and Spar Road intersection	0830	155	10	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
4 15m North of Ferry Street, Walker Street intersection	0900	155	25	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 100m North of Inglis Street and Spar Road intersection	0900	155	7	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
6 100m North of Inglis Street and Spar Road intersection	0935	155	7	Southwest	Downwind	Workers doing roof construction	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 15m North of Ferry Street, Walker Street intersection	1000	155	6	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 100m North of Inglis Street and Spar Road intersection	1000	155	10	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
9 100m North of Inglis Street and Spar Road intersection	1045	155	5	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
10 15m North of Ferry Street, Walker Street intersection	1100	155	4	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 100m North of Inglis Street and Spar Road intersection	1100	155	8	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
12 100m North of Inglis Street and Spar Road intersection	1115	155	7	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
13 15m North of Ferry Street, Walker Street intersection	1200	155	2	Southwest	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 100m North of Inglis Street and Spar Road intersection	1200	155	17	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 100m North of Inglis Street and Spar Road intersection	1225	155	13	Southwest	Downwind	Excavator in operation	No observations seen to affect sampling integrity
16 15m North of Ferry Street, Walker Street intersection	1300	155	1	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 100m North of Inglis Street and Spar Road intersection	1300	155	36	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
18 100m North of Inglis Street and Spar Road intersection	1315	155	14	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
19 15m North of Ferry Street, Walker Street intersection	1400	155	2	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 100m North of Inglis Street and Spar Road intersection	1400	155	26	Southwest	Downwind	Workers doing roof construction	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 100m North of Inglis Street and Spar Road intersection	1430	155	10	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
22 15m North of Ferry Street, Walker Street intersection	1500	155	2	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 100m North of Inglis Street and Spar Road intersection	1500	155	12	Southwest	Downwind	No activity observed onsite	No observations seen to affect sampling integrity
24 100m North of Inglis Street and Spar Road intersection	1535	155	19	Southwest	Downwind	Workers doing roof construction	No observations seen to affect sampling integrity
25 15m North of Ferry Street, Walker Street intersection	1600	155	12	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 100m North of Inglis Street and Spar Road intersection	1600	155	9	Southwest	Downwind	No activity observed onsite	No observations seen to affect sampling integrity
27 100m North of Inglis Street and Spar Road intersection	1645	155	8	Southwest	Downwind	No activity observed onsite	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 ($\mu\text{g}/\text{m}^3$)
100m North of Inglis Street and Spar Road intersection	0800 to 0859	8	990
100m North of Inglis Street and Spar Road intersection	0900 to 0959	15	990
100m North of Inglis Street and Spar Road intersection	1000 to 1059	23	990
100m North of Inglis Street and Spar Road intersection	1100 to 1159	31	990
100m North of Inglis Street and Spar Road intersection	1200 to 1259	46	990
100m North of Inglis Street and Spar Road intersection	1300 to 1359	71	990
100m North of Inglis Street and Spar Road intersection	1400 to 1459	91	990
100m North of Inglis Street and Spar Road intersection	1500 to 1559	108	990
100m North of Inglis Street and Spar Road intersection	1600 to 1659	117	990

VOC Monitoring

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