

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-17
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	25 th September, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0021

**SUBJECT: 24th September, 2008, 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 24th of September, 2008. Alison Giovannetti and Colin MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Sunny with cloudy periods
- Temperature: approximately 11°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 0730 and sampling began as soon as there was site activity. Air monitoring was performed during EarthTech's construction activities.*

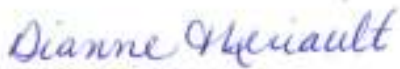
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 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
24th September, 2008

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 Midland along fence on Railway Road	0810	155	79	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 60m West of Inglis Street, Spar Road intersection	0810	155	10	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 60m West of Inglis Street, Spar Road intersection	0830	155	12	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
4 50m East of Midland along fence on Railway Road	0900	155	15	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 60m West of Inglis Street, Spar Road intersection	0900	155	4	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
6 60m West of Inglis Street, Spar Road intersection	0920	155	6	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
7 50m East of Midland along fence on Railway Road	1000	155	4	North	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
8 60m West of Inglis Street, Spar Road intersection	1000	155	18	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
9 60m West of Inglis Street, Spar Road intersection	1030	155	7	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
10 50m East of Midland along fence on Railway Road	1100	155	5	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 60m West of Inglis Street, Spar Road intersection	1100	155	16	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
12 60m West of Inglis Street, Spar Road intersection	1115	155	26	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
13 50m East of Midland along fence on Railway Road	1200	155	71	Northwest	Upwind	Background	No observations seen to affect sampling integrity
14 60m West of Inglis Street, Spar Road intersection	1200	155	12	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
15 60m West of Inglis Street, Spar Road intersection	1245	155	17	Northwest	Downwind	No activity observed on site	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
16 50m East of Midland along fence on Railway Road	1300	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 60m West of Inglis Street, Spar Road intersection	1300	155	13	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
18 60m West of Inglis Street, Spar Road intersection	1345	155	20	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
19 50m East of Midland along fence on Railway Road	1400	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 60m West of Inglis Street, Spar Road intersection	1400	155	10	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
21 60m West of Inglis Street, Spar Road intersection	1420	155	10	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
22 50m East of Midland along fence on Railway Road	1500	155	10	Northwest	Upwind	Background	No observations seen to affect sampling integrity
23 60m West of Inglis Street, Spar Road intersection	1500	155	7	Northwest	Downwind	No activity observed on site	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
24 60m West of Inglis Street, Spar Road intersection	1530	155	6	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
25 50m East of Midland along fence on Railway Road	1600	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
26 60m West of Inglis Street, Spar Road intersection	1600	155	13	Northwest	Downwind	Two excavators operating	No observations seen to effect sampling integrity
27 60m West of Inglis Street, Spar Road intersection	1615	155	17	Northwest	Downwind	No activity observed on site	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 ($\mu\text{g}/\text{m}^3$)
60m West of Inglis Street, Spar Road intersection	0800 to 0859	11	990
60m West of Inglis Street, Spar Road intersection	0900 to 0959	27	990
60m West of Inglis Street, Spar Road intersection	1000 to 1059	52	990
60m West of Inglis Street, Spar Road intersection	1100 to 1159	75	990
60m West of Inglis Street, Spar Road intersection	1200 to 1259	90	990
60m West of Inglis Street, Spar Road intersection	1300 to 1359	106	990
60m West of Inglis Street, Spar Road intersection	1400 to 1459	116	990
60m West of Inglis Street, Spar Road intersection	1500 to 1559	123	990
60m West of Inglis Street, Spar Road intersection	1600 to 1659	138	990

VOC Monitoring

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