

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1194-20
FROM	Dianne Theriault	SHIFT:	0730 to 1700
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	30 th September, 2008		Terry Smith, ALL-TECH
		STPA NO.	TP2-0024

**SUBJECT: 29th 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 29th of September, 2008. Grant Harrigan 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:

- Overcast
- Temperature: approximately 15°C
- Wind Direction: Southwest

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. Monitoring was put on standby between 1300 and 1400 due to precipitation.*

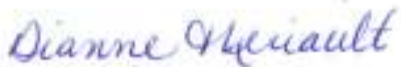
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Grant Harrigan 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:

Shawn Bernon shawn@tarpondscleanup.ca, Wilfred Kaiser wilfred@tarpondscleanup.ca, Nancy LeDrew nancy@tarpondscleanup.ca, Trish Magliaro trish@tarpondscleanup.ca, Terry Smith tsmith@toalltech.com, Phyllis Low pilow@toalltech.com, Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@croworld.com, Darren Lawless dlawless@toalltech.com, Kevin MacPherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Material Processing Facility
29th September, 2008

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
1 30m Southeast of Ferry Street, Walker Street intersection	0810	155	39	Southwest	Upwind	Background	Gusting Winds
2 200m North of Ferry Street, Inglis Street intersection	0810	155	37	Southwest	Downwind	Excavators moving material	Gusting Winds
3 200m North of Ferry Street, Inglis Street intersection	0825	155	39	Southwest	Downwind	Excavators moving material	Gusting Winds
4 30m Southeast of Ferry Street, Walker Street intersection	0900	155	35	Southwest	Upwind	Background	Gusting Winds
5 200m North of Ferry Street, Inglis Street intersection	0910	155	37	Southwest	Downwind	Excavators moving material	Gusting Winds
6 200m North of Ferry Street, Inglis Street intersection	0928	155	37	Southwest	Downwind	Excavators moving material	Gusting Winds
7 30m Southeast of Ferry Street, Walker Street intersection	1000	155	38	Southwest	Upwind	Background	Gusting Winds

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 200m North of Ferry Street, Inglis Street intersection	1015	155	38	Southwest	Downwind	No activity observed on site	Gusting Winds
9 200m North of Ferry Street, Inglis Street intersection	1032	155	34	Southwest	Downwind	Excavators moving material	Light Rain
10 30m Southeast of Ferry Street, Walker Street intersection	1100	155	29	Southwest	Upwind	Background	Light Rain
11 200m North of Ferry Street, Inglis Street intersection	1100	155	33	Southwest	Downwind	Excavators moving material	Light Rain
12 200m North of Ferry Street, Inglis Street intersection	1115	155	38	Southwest	Downwind	Excavators moving material	Light Rain
13 30m Southeast of Ferry Street, Walker Street intersection	1200	155	29	Southwest	Upwind	Background	Light Rain
14 200m North of Ferry Street, Inglis Street intersection	1245	155	40	Southwest	Downwind	Excavators moving material	Light Rain
15 30m Southeast of Ferry Street, Walker Street intersection	1400	155	9	Southwest	Upwind	Background	Light Rain

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 200m North of Ferry Street, Inglis Street intersection	1400	155	28	Southwest	Downwind	Excavators moving material	Light Rain
17 200m North of Ferry Street, Inglis Street intersection	1420	155	33	Southwest	Downwind	Excavators moving material	Light Rain
18 30m Southeast of Ferry Street, Walker Street intersection	1500	155	9	Southwest	Upwind	Background	Light Rain
19 200m North of Ferry Street, Inglis Street intersection	1503	155	34	Southwest	Downwind	No activity observed on site	Light Rain
20 200m North of Ferry Street, Inglis Street intersection	1525	155	25	Southwest	Downwind	Excavators moving material	Light Rain
21 30m Southeast of Ferry Street, Walker Street intersection	1600	155	9	Southwest	Upwind	Background	Light Rain
22 200m North of Ferry Street, Inglis Street intersection	1600	155	18	Southwest	Downwind	Excavators moving material	Light Rain
23 200m North of Ferry Street, Inglis Street intersection	1615	155	20	Southwest	Downwind	No activity observed on site	Light Rain

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 ($\mu\text{g}/\text{m}^3$)
200m North of Ferry Street, Inglis Street intersection	0800 to 0859	38	990
200m North of Ferry Street, Inglis Street intersection	0900 to 0959	75	990
200m North of Ferry Street, Inglis Street intersection	1000 to 1059	111	990
200m North of Ferry Street, Inglis Street intersection	1100 to 1159	147	990
200m North of Ferry Street, Inglis Street intersection	1200 to 1259	187	990
200m North of Ferry Street, Inglis Street intersection	1400 to 1459	217	990
200m North of Ferry Street, Inglis Street intersection	1500 to 1559	247	990
200m North of Ferry Street, Inglis Street intersection	1600 to 1659	266	990

VOC Monitoring

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