

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1189-04
<b>FROM</b>	Dianne Theriault	<b>SHIFT:</b>	0730 to 1230
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA
<b>FAX</b>	(902) 539-3381		Wilfred Kaiser, STPA
<b>DATE</b>	28 <sup>th</sup> August, 2008		Terry Smith, ALL-TECH
		<b>STPA NO.</b>	<b>TP2-0004</b>

**SUBJECT: 28<sup>th</sup> August, 2008, Real-time Air Monitoring Results  
Sydney Tar Ponds Agency – TP2 Material Processing Facility  
FINAL REPORT**

---

Attached is a summary of Real-time particulate (as PM<sub>10</sub>) results for air monitoring performed on the 28<sup>th</sup> of August, 2008. Kelly Morrison 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:

- Overcast
- Temperature: approximately 16°C
- Wind Direction: East

**Comments:** *ALL-TECH was on-Site at 0730 and sampling began as soon as there was site activity. Sampling was put on standby at 1000, as directed by STPA, due to lack of on-site activity, and was later terminated for the day at 1230. Air monitoring was performed during EarthTech's construction activities.*

All downwind and upwind measurements of PM<sub>10</sub> were below the established Site Action Level for this parameter of 155 µg/m<sup>3</sup>.

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 Kelly Morrison 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](mailto:shawn@tarpondscleanup.ca), Wilfred Kaiser [wilfred@tarpondscleanup.ca](mailto:wilfred@tarpondscleanup.ca), Nancy LeDrew [nancy@tarpondscleanup.ca](mailto:nancy@tarpondscleanup.ca), Trish Magliaro [trish@tarpondscleanup.ca](mailto:trish@tarpondscleanup.ca), Terry Smith [tsmith@toalltech.com](mailto:tsmith@toalltech.com), Phyllis Low [pilow@toalltech.com](mailto:pilow@toalltech.com), Dianne Theriault [dtheriault@toalltech.com](mailto:dtheriault@toalltech.com), Darren Gardiner [dgardiner@croworld.com](mailto:dgardiner@croworld.com), Darren Lawless [dlawless@toalltech.com](mailto:dlawless@toalltech.com), Kevin Mac Pherson [kevinmacp@cbcl.ca](mailto:kevinmacp@cbcl.ca), Kathy Harquail [kharquail@toalltech.com](mailto:kharquail@toalltech.com)

**Real-time Airborne PM<sub>10</sub> Concentration Results**  
**Sydney Tar Ponds Agency – Material Processing Facility**  
**28<sup>th</sup> August, 2008**

Sample No. & Air Monitoring Location	Time of Day	PM <sub>10</sub> Action Level (µg/m <sup>3</sup> )	Average Result (µg/m <sup>3</sup> )	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 40m Northeast of Inglis Street and Spar Road intersection	0800	155	19	East	Upwind	Background	No observations seen to effect sampling integrity
2 Railway property, 40m North of Ferry Street	0800	155	19	East	Downwind	Site not visible from sampling location	No observations seen to effect sampling integrity
3 Railway property, 40m North of Ferry Street	0845	155	18	East	Downwind	Site not visible from sampling location	No observations seen to effect sampling integrity
4 40m Northeast of Inglis Street and Spar Road intersection	0900	155	18	East	Upwind	Background	No observations seen to effect sampling integrity
5 Railway property, 40m North of Ferry Street	0900	155	18	East	Downwind	Site not visible from sampling location	No observations seen to effect sampling integrity
6 Railway property, 40m North of Ferry Street	0940	155	18	East	Downwind	Site not visible from sampling location	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 ( $\mu\text{g}/\text{m}^3$ )
Railway property, 40m North of Ferry Street	0800 to 0859	19	990
Railway property, 40m North of Ferry Street	0900 to 0959	37	990

### VOC Monitoring

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