

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1243-11
<b>FROM</b>	Dianne Theriault	<b>SHIFT:</b>	0730 to 1030
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
<b>FAX</b>	(902) 539-3381		
<b>DATE</b>	17 <sup>th</sup> December, 2008	<b>STPA NO.</b>	<b>TP2-0073</b>

**SUBJECT: 16<sup>th</sup> December, 2008, Real-time Air Monitoring Results  
Sydney Tar Ponds Agency – 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 16<sup>th</sup> of December, 2008. Colin MacIsaac and Grant Harrigan, of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Cloudy, rain
- Temperature: approximately 10°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. Sampling was put on stand-by at 0830 and cancelled at 1030 due to ongoing precipitation.*

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 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](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**  
**16<sup>th</sup> December, 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 200m West of Ferry Street Bridge	0800	155	10	Southwest	Upwind	Background	No observations seen to effect sampling integrity
2 90m North of Inglis Street and Spar Road intersection	0800	155	16	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 90m North of Inglis Street and Spar Road intersection	0830	155	13	Southwest	Downwind	Machine moving material	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 (µg/m <sup>3</sup> )	Dust Budget Exceedance Value (µg/m <sup>3</sup> )
90m North of Inglis Street and Spar Road intersection	0800 to 0859	6	990

### VOC Monitoring

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