

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1281-01
<b>FROM</b>	Dianne Theriault	<b>SHIFT:</b>	0730 to 1715
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA Wilfred Kaiser, STPA Terry Smith, ALL-TECH
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<b>DATE</b>	4 <sup>th</sup> March, 2009	<b>STPA NO.</b>	<b>TP6B-0003</b>

**SUBJECT: 4<sup>th</sup> March, 2009, Real-time Air Monitoring Results  
Sydney Tar Ponds Agency – Tar Ponds Sampling  
FINAL REPORT**

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Attached is a summary of Real-time particulate (as PM<sub>10</sub>) results for air monitoring performed on the 4<sup>th</sup> of March, 2009. Kelly Morrison and Alison Giovannetti, of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly cloudy, sunny breaks
- Temperature: approximately -6°C
- Wind Direction: West

**Comments:** *ALL-TECH was on-Site at 0730 hours and sampling began as soon as there was site activity. Air monitoring was performed during sampling activities in the South Pond.*

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,



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Dianne Theriault, B.Tech  
Environmental Technologist  
**ALL-TECH Environmental Services Cape Breton Ltd.**

Copied via e-mail:

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**Real-time Airborne PM<sub>10</sub> Concentration Results**  
**Sydney Tar Ponds Agency – Tar Ponds Sampling**  
**4<sup>th</sup> March, 2009**

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 10 m East of the Wintering Harbour entrance near Ferry Street	1100	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
2 50m East of Ferry Street bridge	1100	155	13	West	Downwind	Excavator in operation	No observations seen to affect sampling integrity
3 50m East of Ferry Street bridge	1145	155	19	West	Downwind	Loading excavator on flatbed	No observations seen to affect sampling integrity
4 10 m East of the Wintering Harbour entrance near Ferry Street	1200	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
5 50m East of Ferry Street bridge	1200	155	15	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 50m East of Ferry Street bridge	1225	155	19	West	Downwind	No activity observed on site	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 ( $\mu\text{g}/\text{m}^3$ )
50m East of Ferry Street bridge	1100 to 1259	16	990
50m East of Ferry Street bridge	1200 to 1359	33	990

### VOC Monitoring

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