

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1331-32
<b>FROM</b>	Dianne Theriault	<b>SHIFT:</b>	0730 to 1215
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA
<b>FAX</b>	(902) 539-3381		Wilfred Kaiser, STPA
<b>DATE</b>	29 <sup>th</sup> June, 2009		Terry Smith, ALL-TECH
		<b>STPA NO.</b>	<b>TP6D-SP-0106</b>

**SUBJECT: 26<sup>th</sup> June, 2009 Real-time Air Monitoring Results  
Sydney Tar Ponds Agency – Access Roads, South Pond  
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 26<sup>th</sup> of June, 2009. Colin MacIsaac and Donald MacIsaac of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:

- Mainly sunny
- Temperature: approximately 26°C
- Wind Direction: Southwest

**Comments:** *Air monitoring was delayed until 0730 hours due to high humidity, and began at 0930 hours when weather conditions were within instrument specifications. Air monitoring was performed during AECOM's construction activities.*

All downwind and upwind measurements of PM<sub>10</sub> were below the established Site Action Level for this parameter of 180 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 Colin MacIsaac 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 – Access Roads, South Pond**  
**26<sup>th</sup> June, 2009**

<b>Sample No. &amp; Air Monitoring Location</b>	<b>Time of Day</b>	<b>PM<sub>10</sub> Action Level (µg/m<sup>3</sup>)</b>	<b>Average Result (µg/m<sup>3</sup>)</b>	<b>Wind Direction</b>	<b>Relative Position</b>	<b>Description of Activity</b>	<b>Observations that may affect sample</b>
1 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	0935	180	12	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
2 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	0945	180	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
3 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	0950	180	7	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	1000	180	14	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	1005	180	6	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	1040	180	4	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

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
7 70m South of Intercolonial St. fixed station (N 46°08.514' W 060°11.388')	1100	180	10	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	1100	180	4	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 30m West of Plaza Ford Dealership (N 46°08.421' W 060°11.280')	1125	180	4	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

**Notes: Air sample duration for each monitoring event was 15 minutes.**

### Summary of Downwind PM<sub>10</sub> Action Levels

Average PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )	Averaging Period (Hours)	Downwind Action Level (µg/m <sup>3</sup> )
10	1	125

### VOC Monitoring

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