

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1193-12
<b>FROM</b>	Dianne Theriault	<b>SHIFT:</b>	0730 to 1115
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA
<b>FAX</b>	(902) 539-3381		Wilfred Kaiser, STPA
<b>DATE</b>	12 <sup>th</sup> September, 2008		Terry Smith, ALL-TECH
		<b>STPA NO.</b>	<b>PS-0056</b>

**SUBJECT: 11<sup>th</sup> September, 2008, Real-time Air Monitoring Results  
Sydney Tar Ponds Agency – South Pond Pilot Study  
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 11<sup>th</sup> of September, 2008. Tyler Rowe 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:

- Sunny
- Temperature: approximately 17°C
- Wind Direction: Southwest to West to Northwest

**Comments:** *ALL-TECH was on-Site at 0730 and sampled until 1030 when they were informed by the STPA that there were no construction activities scheduled for the rest of the day.*

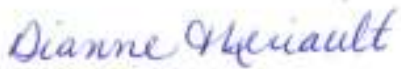
All downwind and upwind measurements of PM<sub>10</sub> were below the established Site Action Level for this parameter of 155 µg/m<sup>3</sup>.

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 –South Pond Pilot Study**  
**11<sup>th</sup> September, 2008**

<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 Inglis St., 20m south of Spar Rd.	0805	155	8	Southwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
2 5m Northeast of fixed air station on Intercolonial St.	0810	155	13	Southwest	Upwind	Background	No observations seen to effect sampling integrity
3 Inglis St., 20m south of Spar Rd	0820	155	7	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 6m North of fixed station on Intercolonial St.	0900	155	7	West	Upwind	Background	No observations seen to affect sampling integrity
5 Inglis St., 70m south of Spar Rd.	0900	155	6	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 Inglis St., 70m south of Spar Rd.	0915	155	8	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
7 10m North of Ferry and Walker St.	1000	155	9	Northwest	Upwind	Background	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
8 Inglis St., 150m North of the STPA building	1000	155	10	Northwest	Downwind	No activity observed on site	No observations seen to effect sampling integrity
9 Inglis St., 150m North of the STPA building	1020	155	9	Northwest	Downwind	Background	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 ( $\mu\text{g}/\text{m}^3$ )
Inglis St., 20m south of Spar Rd.	0800 to 0859	15	990
Inglis St., 70m south of Spar Rd.	0900 to 0959	29	990
Inglis St., 150m North of the STPA building	1000 to 1059	48	990

### VOC Monitoring

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