

## MEMORANDUM

<b>TO</b>	Dawn MacNeil, STPA	<b>FILE NO.</b>	S-1032
<b>FROM</b>	Grant Harrigan	<b>SHIFT:</b>	630 to 1530
<b>TEL</b>	(902) 539-3012	<b>CC:</b>	Shawn Bernon, STPA
<b>FAX</b>	(902) 539-3381		Wilfred Kaiser, STPA
<b>DATE</b>	November 13 <sup>th</sup> , 2007		Terry Smith, ALL-TECH

**SUBJECT: November 13<sup>th</sup>, 2007, Real-Time Air Monitoring Results  
Sydney Tar Ponds Agency – Cooling Pond  
FINAL REPORT**

Attached is a summary of Real-Time particulate (as PM<sub>10</sub>) results for air monitoring performed on November 13<sup>th</sup>, 2007. Grant Harrigan and Darren Lawless of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

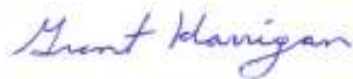
- Overcast
- Temperature: (Approximately 2 °C)
- Wind Direction: West

**Comments:** *ALL-TECH was on-Site at 0630 and sampling commenced shortly after the contractor arrived on-site. Air monitoring was performed during EarthTech's pre-mobilization. In accordance with ALL-TECH's policy sampling was concluded for the day due to rain/snow conditions. Precipitation was observed at 1440hrs and subsequently sampling was suspended.*

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

This report has been prepared by Grant Harrigan and reviewed by Darren Lawless. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Grant Harrigan, 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 – Coke Ovens Site  
 November 13<sup>th</sup>, 2007**

<b>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>Activity Location</b>	<b>Observations</b>
1 Intercolonial Fixed Station Sampling Location	0815	155	8	West	Upwind	Background	No observations seen to effect sampling integrity
2 Intercolonial Fixed Station Sampling Location	0920	155	8	West	Upwind	Background	No observations seen to effect sampling integrity
3 Intercolonial Fixed Station Sampling Location	1005	155	7	West	Upwind	Background	No observations seen to effect sampling integrity
4 Across from Cooling Pond Gate	1045	155	11	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on-site.
5 Intercolonial Fixed Station Sampling Location	1100	155	7	West	Upwind	Background	No observations seen to effect sampling integrity
6 Across from Cooling Pond Gate	1107	155	7	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on-site.
7 Across from Cooling Pond Gate	1154	155	8	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on-site.

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	Activity Location	Observations
8 Intercolonial Fixed Station Sampling Location	1202	155	7	West	Upwind	Background	No observations seen to effect sampling integrity
9 Across from Cooling Pond Gate	1213	155	5	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on- site.
10 Across from Cooling Pond Gate	1231	155	5	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on- site.
11 Across from Cooling Pond Gate	1320	155	6	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on- site.
12 Across from Cooling Pond Gate	1338	155	4	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on- site.
13 Across from Cooling Pond Gate	1357	155	5	West	Downwind	Digging / Excavation	Mini-Excavator and Workers with shovels on- site.
14 200m South of Intercolonial Fixed Station Sampling Location	1401	155	26	Southwest	Upwind	Background	Wind blowing dust off gravel road

**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 ( $\mu\text{g}/\text{m}^3$ )
Across from Cooling Pond Gate	1045 to 1107	9	990
Across from Cooling Pond Gate	1154 to 1213	16	990
Across from Cooling Pond Gate	1231 to 1320	22	990
Across from Cooling Pond Gate	1338 to 1357	27	990

### VOC Monitoring

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

\*P.I.D. was used for all samples and was below detection level.