

MEMORANDUM

TO	Dawn MacNeil, STPA	FILE NO.	S-1280-07
FROM	Dianne Theriault	SHIFT:	0730 to 1615
TEL	(902) 539-3012	CC:	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	12 th March, 2009		Terry Smith, ALL-TECH
		STPA NO.	BTD-0007

**SUBJECT: 12th March, 2009, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Benzol Tank Demolition
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 12th of March, 2009. Colin MacIsaac and Reg Peters, of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities.

Weather conditions on the day of sampling:

- Cloudy with flurries and rain showers
- Temperature: approximately -1°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 0730 hours and sampling was delayed due to precipitation, and began as soon as weather conditions were within instrument specifications. Air monitoring was performed during Nova Scotia Lands' construction activities.*

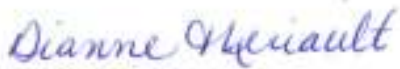
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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,



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

Copied via e-mail:

Shawn Bernon shawn@tarpondscleanup.ca, Wilfred Kaiser wilfred@tarpondscleanup.ca, Nancy LeDrew nancy@tarpondscleanup.ca, Trish Magliaro trish@tarpondscleanup.ca, Terry Smith tsmith@toalltech.com, Phyllis Low pilow@toalltech.com, Dianne Theriault dtheriault@toalltech.com, Darren Gardiner dgardiner@croworld.com, Darren Lawless dlawless@toalltech.com, Kevin Mac Pherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Benzol Tank Demolition
12th March, 2009

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 70m South of Spar Road, Spar Extension intersection	0910	155	11	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 60m East of Coke Ovens Security Gate	0915	155	7	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 60m East of Coke Ovens Security Gate	0935	155	5	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 70m South of Spar Road, Spar Extension intersection	1000	155	23	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 60m East of Coke Ovens Security Gate	1000	155	4	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 60m East of Coke Ovens Security Gate	1045	155	1	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
7 70m South of Spar Road, Spar Extension intersection	1100	155	4	Northwest	Upwind	Background	No observations seen to affect sampling integrity
8 60m East of Coke Ovens Security Gate	1100	155	6	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 60m East of Coke Ovens Security Gate	1140	155	6	Northwest	Downwind	Machines moving	No observations seen to affect sampling integrity
10 70m South of Spar Road, Spar Extension intersection	1200	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
11 60m East of Coke Ovens Security Gate	1200	155	6	Northwest	Downwind	Machines moving	No observations seen to affect sampling integrity
12 60m East of Coke Ovens Security Gate	1245	155	7	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
13 70m South of Spar Road, Spar Extension intersection	1300	155	14	Northwest	Upwind	Background	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM ₁₀ Action Level (µg/m ³)	Average Result (µg/m ³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
14 60m East of Coke Ovens Security Gate	1300	155	6	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 60m East of Coke Ovens Security Gate	1345	155	8	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 70m South of Spar Road, Spar Extension intersection	1400	155	9	Northwest	Upwind	Background	No observations seen to affect sampling integrity
17 60m East of Coke Ovens Security Gate	1400	155	8	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
18 60m East of Coke Ovens Security Gate	1435	155	8	Northwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
19 70m South of Spar Road, Spar Extension intersection	1500	155	9	Northwest	Upwind	Background	No observations seen to affect sampling integrity
20 60m East of Coke Ovens Security Gate	1500	155	8	Northwest	Downwind	Machines moving	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM₁₀ Action Level (µg/m³)	Average Result (µg/m³)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
21 60m East of Coke Ovens Security Gate	1530	155	8	Northwest	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 ($\mu\text{g}/\text{m}^3$)
60m East of Coke Ovens Security Gate	0900 to 0959	6	990
60m East of Coke Ovens Security Gate	1000 to 1059	9	990
60m East of Coke Ovens Security Gate	1100 to 1159	15	990
60m East of Coke Ovens Security Gate	1200 to 1259	22	990
60m East of Coke Ovens Security Gate	1300 to 1359	29	990
60m East of Coke Ovens Security Gate	1400 to 1459	37	990
60m East of Coke Ovens Security Gate	1500 to 1559	45	990

VOC Monitoring

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