

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Dianne Theriault
TEL (902) 539-3012
FAX (902) 539-3381
DATE 13th January, 2009

FILE NO. S-1258-03
SHIFT: 0630 to 1130
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH
STPA NO. COCW-0034

**SUBJECT: 12th January, 2009, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 12th of January, 2009. Colin MacIsaac 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 with flurries
- Temperature: approximately -4°C
- Wind Direction: West

Comments: ALL-TECH was on-Site at 0630 hours and sampling began at 0700 hours. Air monitoring was later cancelled at 1100 hours as there was no on site activity.

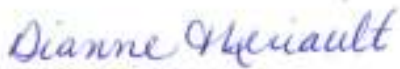
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Alison Giovannetti 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 MacPherson kevinmacp@cbcl.ca, Kathy Harquail kharquail@toalltech.com

Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Coke Ovens Vertical Cutoff Walls
12th January, 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 110m South of Spar and Spar Rd. Ext intersection	0700	155	4	West	Upwind	Background	No observations seen to affect sampling integrity
2 30m East of Coke Ovens Security Trailer	0700	155	8	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
3 30m East of Coke Ovens Security Trailer	0745	155	8	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
4 110m South of Spar and Spar Rd. Ext intersection	0800	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
5 30m East of Coke Ovens Security Trailer	0800	155	6	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 30m East of Coke Ovens Security Trailer	0845	155	4	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
7 110m South of Spar and Spar Rd. Ext intersection	0900	155	5	West	Upwind	Background	No observations seen to effect 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
8 30m East of Coke Ovens Security Trailer	0900	155	5	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 30m East of Coke Ovens Security Trailer	0920	155	4	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
10 110m South of Spar and Spar Rd. Ext intersection	1000	155	4	West	Upwind	Background	No observations seen to effect sampling integrity
11 30m East of Coke Ovens Security Trailer	1000	155	2	West	Downwind	No activity observed on site	No observations seen to effect sampling integrity
12 30m East of Coke Ovens Security Trailer	1045	155	3	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 ($\mu\text{g}/\text{m}^3$)
30m East of Coke Ovens Security Trailer	0700 to 0759	8	990
30m East of Coke Ovens Security Trailer	0800 to 0859	13	990
30m East of Coke Ovens Security Trailer	0900 to 0959	22	990
30m East of Coke Ovens Security Trailer	1000 to 1059	25	990

VOC Monitoring

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