

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Dianne Theriault
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DATE 4th March, 2009

FILE NO. S-1280-01
SHIFT: 0630 to 1715
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH
STPA NO. **BTD-0001**

**SUBJECT: 4th 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 4th of March, 2009. Jennifer Andrews 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:
- Mainly cloudy, sunny breaks
- Temperature: approximately -6°C
- Wind Direction: West

Comments: *ALL-TECH was on-Site at 0730 hours and sampling began as soon as there was site activity. Air monitoring was performed during Nova Scotia Lands construction activities.*

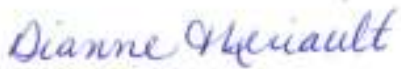
All downwind and upwind measurements of PM₁₀ were below the established Site Action Level for this parameter of 155 µg/m³.

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 Jennifer Andrews 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:

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Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Benzol Tank Demolition
4th March, 2009

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
1 100M SE of Spar Rd and Spar Rd Extention Intersection	0800	155	11	West	Upwind	Background	No observations seen to affect sampling integrity
2 Coke Ovens Security Station	0800	155	5	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 Coke Ovens Security Station	0830	155	6	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
4 100M SE of Spar Rd and Spar Rd Extention Intersection	0900	155	9	West	Upwind	Background	No observations seen to affect sampling integrity
5 Coke Ovens Security Station	0900	155	4	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
6 Coke Ovens Security Station	0945	155	8	West	Downwind	No activity observed on site	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
7 100M SE of Spar Rd and Spar Rd Extension Intersection	1000	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
8 Coke Ovens Security Station	1000	155	6	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 Coke Ovens Security Station	1030	155	7	West	Downwind	Machine arrived on site	No observations seen to affect sampling integrity
10 100M SE of Spar Rd and Spar Rd Extension Intersection	1100	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
11 Coke Ovens Security Station	1100	155	6	West	Downwind	Erecting Fence	No observations seen to affect sampling integrity
12 Coke Ovens Security Station	1145	155	5	West	Downwind	Erecting Fence	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
13 100M SE of Spar Rd and Spar Rd Extension Intersection	1200	155	7	West	Upwind	Background	No observations seen to affect sampling integrity
14 Coke Ovens Security Station	1200	155	5	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 Coke Ovens Security Station	1245	155	5	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
16 100M SE of Spar Rd and Spar Rd Extension Intersection	1300	155	6	West	Upwind	Background	No observations seen to affect sampling integrity
17 Coke Ovens Security Station	1300	155	5	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
18 100M SE of Spar Rd and Spar Rd Extension Intersection	1400	155	27	West	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
19 Coke Ovens Security Station	1400	155	6	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
20 Coke Ovens Security Station	1430	155	2	West	Downwind	Truck arrived on site	No observations seen to affect sampling integrity
21 100M SE of Spar Rd and Spar Rd Extension Intersection	1500	155	5	West	Upwind	Background	No observations seen to affect sampling integrity
22 Coke Ovens Security Station	1500	155	2	West	Downwind	Equipment moving	No observations seen to affect sampling integrity
23 Coke Ovens Security Station	1520	155	2	West	Downwind	Equipment moving	No observations seen to affect sampling integrity
24 100M SE of Spar Rd and Spar Rd Extension Intersection	1600	155	6	West	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
25 Coke Ovens Security Station	1600	155	2	West	Downwind	No activity observed on site	No observations seen to affect sampling integrity
26 Coke Ovens Security Station	1630	155	2	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 ($\mu\text{g}/\text{m}^3$)
Coke Ovens Security Station	0800 to 0859	14	990
Coke Ovens Security Station	0900 to 0959	38	990
Coke Ovens Security Station	1000 to 1059	55	990
Coke Ovens Security Station	1100 to 1159	67	990
Coke Ovens Security Station	1200 to 1259	81	990
Coke Ovens Security Station	1300 to 1359	94	990
Coke Ovens Security Station	1400 to 1459	97	990
Coke Ovens Security Station	1500 to 1559	100	990
Coke Ovens Security Station	1600 to 1659	102	990

VOC Monitoring

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