

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Dianne Theriault
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DATE 1st May, 2009

FILE NO. S-1291-20
SHIFT: 1330 to 1730
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH

STPA NO. TP2-0154

**SUBJECT: 30th April, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Material Processing Facility
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 30th of April, 2009. Tyler Rowe and Dwayne Timmons of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH) performed all air monitoring activities.

Weather conditions on the day of sampling:
- Mainly sunny
- Temperature: approximately 8°C
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 1330 hours and sampling began as soon as there was site activity. Air monitoring was performed during AECOM's 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 Tyler Rowe 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 – Material Processing Facility
30th April, 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 150m East of railway building	1400	155	8	Northwest	Upwind	Background	No observations seen to affect sampling integrity
2 20m West of Inglis St. and Spar Rd. intersection	1400	155	40	Northwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
3 20m West of Inglis St. and Spar Rd. intersection	1415	155	43	Northwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
4 150m East of railway building	1500	155	8	Northwest	Upwind	Background	No observations seen to affect sampling integrity
5 20m West of Inglis St. and Spar Rd. intersection	1500	155	22	Northwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
6 20m West of Inglis St. and Spar Rd. intersection	1540	155	30	Northwest	Downwind	Excavator moving material	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 150m East of railway building	1600	155	7	Northwest	Upwind	Background	No observations seen to affect sampling integrity
8 20m West of Inglis St. and Spar Rd. intersection	1600	155	27	Northwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
9 20m West of Inglis St. and Spar Rd. intersection	1645	155	23	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 ($\mu\text{g}/\text{m}^3$)
20m West of Inglis St. and Spar Rd. intersection	1400 to 1459	42	990
20m West of Inglis St. and Spar Rd. intersection	1500 to 1559	68	990
20m West of Inglis St. and Spar Rd. intersection	1600 to 1659	93	990

VOC Monitoring

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