

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Dianne Theriault
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DATE 30th January, 2009

FILE NO. S-1257-18
SHIFT: 1030 to 1530
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH

STPA NO. TP2-0096

**SUBJECT: 29th January, 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 29th 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:

- Overcast with flurries, gusting winds
- Temperature: approximately -4°C
- Wind Direction: West

Comments: *ALL-TECH was on-Site at 1030 hours and sampling began as soon as there was site activity, but was later put on standby at 1200 hours and cancelled for the day at 1530 hours due to ongoing precipitation. 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 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:

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Real-time Airborne PM₁₀ Concentration Results
Sydney Tar Ponds Agency – Material Processing Facility
29th January, 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 North of Ferry St. and Railway tracks	1100	155	9	West	Upwind	Background	No observations seen to affect sampling integrity
2 70m North of Inglis St. and Spar Rd. Intersection	1100	155	9	West	Downwind	Bulldozer in operation	No observations seen to affect sampling integrity
3 70m North of Inglis St. and Spar Rd. Intersection	1130	155	10	West	Downwind	Bulldozer in operation	No observations seen to affect sampling integrity
4 100m North of Ferry St. and Railway tracks	1200	155	15	West	Upwind	Background	No observations seen to affect sampling integrity
5 70m North of Inglis St. and Spar Rd. Intersection	1200	155	20	West	Downwind	Bulldozer in operation	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 ($\mu\text{g}/\text{m}^3$)
70m North of Inglis St. and Spar Rd. Intersection	1100 to 1159	10	990
70m North of Inglis St. and Spar Rd. Intersection	1200 to 1259	30	990

VOC Monitoring

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