

MEMORANDUM

TO Dawn MacNeil, STPA
FROM Grant Harrigan
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DATE 14th March, 2008

FILE NO. S-1100-14
SHIFT: 1430 to 1800
CC: Shawn Bernon, STPA
Wilfred Kaiser, STPA
Terry Smith, ALL-TECH

STPA NO. CP-0099

**SUBJECT: 13th March 2008, Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Cooling Pond
FINAL REPORT**

Attached is a summary of Real-time particulate (as PM₁₀) results for air monitoring performed on the 13th of March, 2008. Colin MacIsaac and Tyler Rowe of ALL-TECH Environmental Services Cape Breton Limited (ALL-TECH), performed all air monitoring activities on the asphalt pad.

Weather conditions on the day of sampling:

- Overcast and blowing snow changing to clear skies
- Temperature: approximately -1°C (data unavailable from Environment Canada)
- Wind Direction: Northwest

Comments: *ALL-TECH was on-Site at 1430 to monitor additional activities on the asphalt pad. Sampling began as soon as there was Site activity. Air monitoring was performed during EarthTech's construction activities on the asphalt pad.*

All downwind and upwind measurements of PM₁₀ were well 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 well 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), TVOC sampling is halted and resumes after the precipitation has ended.

This report has been prepared by Colin MacIsaac and reviewed by Grant Harrigan and Dianne Theriault. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,



Grant Harrigan, 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 – Cooling Pond
13th March, 2008

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 40m North of Walker Street, Ferry Street intersection	1500	155	7	Northwest	Upwind	Background	No observations seen to effect sampling integrity
2 35m West of former weigh station, East of Inglis Street	1509	155	4	Northwest	Downwind	Excavators loading dump trucks	No observations seen to effect sampling integrity
3 35m West of former weigh station, East of Inglis Street	1529	155	4	Northwest	Downwind	Excavators loading dump trucks	No observations seen to effect sampling integrity
4 40m North of Walker Street, Ferry Street intersection	1600	155	5	Northwest	Upwind	Background	No observations seen to effect sampling integrity
5 35m West of former weigh station, East of Inglis Street	1600	155	4	Northwest	Downwind	Excavators loading dump trucks	No observations seen to effect sampling integrity
6 35m West of former weigh station, East of Inglis Street	1645	155	3	Northwest	Downwind	No activity observed on-site	No observations seen to effect sampling integrity
7 40m North of Walker Street, Ferry Street intersection	1700	155	6	Northwest	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 35m West of former weigh station, East of Inglis Street	1700	155	5	Northwest	Downwind	No activity observed	No observations seen to effect sampling integrity
9 35m West of former weigh station, East of Inglis Street	1715	155	5	Northwest	Downwind	No activity observed	No observations seen to effect 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 (µg/m ³)	Dust Budget Exceedance Value (µg/m ³)
35m West of former weigh station, East of Inglis Street	1500 to 1559	4	990
35m West of former weigh station, East of Inglis Street	1600 to 1659	8	990
35m West of former weigh station, East of Inglis Street	1700 to 1759	13	990

VOC Monitoring

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