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MEMORANDUM

TO	Dawn MacNeil, STPA	**FILE NO.**	S-1329-15
FROM	Dianne Theriault	**SHIFT:**	0700 to 1730
TEL	(902) 539-3012	**CC:**	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	25th June, 2009		Terry Smith, ALL-TECH
		STPA NO.	**TP2-0183**

SUBJECT: 24th June, 2009 Real-time Air Monitoring Results
Sydney Tar Ponds Agency – Material Processing Facility
FINAL REPORT

Attached is a summary of Real-time particulate (as PM_{10}) results for air monitoring performed on the 24th of June, 2009. Shaun Dove, Chris MacNeil 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:
- Cloudy with showers and sunny periods
- Temperature: approximately 22°C
- Wind Direction: Southwest

Comments: *Air monitoring was delayed until 0900 hours due to high humidity, and began when weather conditions were within instrument specifications. Air monitoring was later put on standby at 1045 hours due to precipitation, and resumed at 1420 hours when weather conditions were within instrument specifications. Air monitoring was performed during AECOM`s construction activities.*

All downwind and upwind measurements of PM_{10} were below the established Site Action Level for this parameter of 180 µg/m^3.

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 PM_{10} Concentration Results
Sydney Tar Ponds Agency – Material Processing Facility
24th June, 2009

Sample No. & Air Monitoring Location	Time of Day	PM_{10} Action Level ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
1 75m South of Ferry St. and Railway Rd. intersection (N 46° 08.680' W 060° 11.477')	0900	180	12	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 20m Northwest of TP2 main entrance (N 46° 08.995' W 060° 11.330')	0900	180	10	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
3 20m Northwest of TP2 main entrance (N 46° 08.995' W 060° 11.330')	0920	180	9	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
4 75m South of Ferry St. and Railway Rd. intersection (N 46° 08.680' W 060° 11.477')	1000	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 20m Northwest of TP2 main entrance (N 46° 08.995' W 060° 11.330')	1000	180	8	Southwest	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 ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
6 20m Northwest of TP2 main entrance (N 46° 08.995' W 060° 11.330')	1025	180	11	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
7 75m South of Ferry St. and Railway Rd. intersection (N 46° 08.680' W 060° 11.477')	1420	180	28	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1420	180	11	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
9 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1435	180	10	Southwest	Downwind	Excavator moving material, zoom boom in operation	No observations seen to affect sampling integrity
10 75m South of Ferry St. and Railway Rd. intersection (N 46° 08.680' W 060° 11.477')	1500	180	9	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1500	180	9	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity

Sample No. & Air Monitoring Location	Time of Day	PM_{10} Action Level ($\mu g/m^3$)	Average Result ($\mu g/m^3$)	Wind Direction	Relative Position	Description of Activity	Observations that may affect sample
12 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1530	180	12	Southwest	Downwind	Excavator moving material	No observations seen to affect sampling integrity
13 75m South of Ferry St. and Railway Rd. intersection (N 46° 08.680' W 060° 11.477')	1600	180	11	Southwest	Upwind	Background	No observations seen to affect sampling integrity
14 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1600	180	13	Southwest	Downwind	Zoom boom in operation	No observations seen to affect sampling integrity
15 100m North of TP2 main entrance (N 46° 09.016' W 060° 11.360')	1645	180	7	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity

Notes: Air sample duration for each monitoring event was 15 minutes.

Summary of Downwind PM_{10} Action Levels

Average PM_{10} Concentration ($\mu g/m^3$)	Averaging Period (Hours)	Downwind Action Level ($\mu g/m^3$)
10	1	125
22	4	85
19	8	70

VOC Monitoring

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