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MEMORANDUM

TO	Dawn MacNeil, STPA	**FILE NO.**	S-1269-01
FROM	Dianne Theriault	**SHIFT:**	0730 to 1730
TEL	(902) 539-3012	**CC:**	Shawn Bernon, STPA
FAX	(902) 539-3381		Wilfred Kaiser, STPA
DATE	3rd February, 2009		Terry Smith, ALL-TECH
		STPA NO.	**TP2-0099**

SUBJECT: 2nd February, 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 2nd of February, 2009. Colin MacIsaac 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 sunny
- Temperature: approximately 3°C
- Wind Direction: Southwest

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

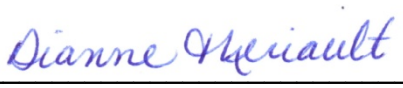
All downwind and upwind measurements of PM_{10} were below the established Site Action Level for this parameter of 155 µg/m^3.

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 Colin MacIsaac 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
2nd February, 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 10m North of Ferry Street, Walker Street intersection	0800	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
2 120m North Inglis, Spar Road intersection	0800	155	21	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
3 120m North Inglis, Spar Road intersection	0835	155	19	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
4 10m North of Ferry Street, Walker Street intersection	0900	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
5 120m North Inglis, Spar Road intersection	0900	155	19	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
6 120m North Inglis, Spar Road intersection	0945	155	23	Southwest	Downwind	Machine 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
7 10m North of Ferry Street, Walker Street intersection	1000	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
8 120m North Inglis, Spar Road intersection	1000	155	18	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
9 120m North Inglis, Spar Road intersection	1040	155	15	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
10 10m North of Ferry Street, Walker Street intersection	1100	155	12	Southwest	Upwind	Background	No observations seen to affect sampling integrity
11 120m North Inglis, Spar Road intersection	1100	155	16	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
12 120m North Inglis, Spar Road intersection	1145	155	16	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
13 10m North of Ferry Street, Walker Street intersection	1200	155	19	Southwest	Upwind	Background	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
14 120m North Inglis, Spar Road intersection	1200	155	15	Southwest	Downwind	No activity observed on site	No observations seen to affect sampling integrity
15 120m North Inglis, Spar Road intersection	1235	155	16	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
16 10m North of Ferry Street, Walker Street intersection	1300	155	17	Southwest	Upwind	Background	No observations seen to affect sampling integrity
17 120m North Inglis, Spar Road intersection	1300	155	17	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
18 120m North Inglis, Spar Road intersection	1345	155	13	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
19 10m North of Ferry Street, Walker Street intersection	1400	155	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
20 120m North Inglis, Spar Road intersection	1400	155	14	Southwest	Downwind	Machine 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
21 120m North Inglis, Spar Road intersection	1430	155	15	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
22 10m North of Ferry Street, Walker Street intersection	1500	155	15	Southwest	Upwind	Background	No observations seen to affect sampling integrity
23 120m North Inglis, Spar Road intersection	1500	155	13	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
24 120m North Inglis, Spar Road intersection	1520	155	14	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
25 10m North of Ferry Street, Walker Street intersection	1600	155	19	Southwest	Upwind	Background	No observations seen to affect sampling integrity
26 120m North Inglis, Spar Road intersection	1600	155	16	Southwest	Downwind	Machine moving material	No observations seen to affect sampling integrity
27 120m North Inglis, Spar Road intersection	1645	155	18	Southwest	Downwind	Machine moving material	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 ($\mu g/m^3$)	Dust Budget Exceedance Value ($\mu g/m^3$)
120m North Inglis, Spar Road intersection	0800 to 0859	20	990
120m North Inglis, Spar Road intersection	0900 to 0959	41	990
120m North Inglis, Spar Road intersection	1000 to 1059	58	990
120m North Inglis, Spar Road intersection	1100 to 1159	74	990
120m North Inglis, Spar Road intersection	1200 to 1259	89	990
120m North Inglis, Spar Road intersection	1300 to 1359	104	990
120m North Inglis, Spar Road intersection	1400 to 1459	119	990
120m North Inglis, Spar Road intersection	1500 to 1559	132	990
120m North Inglis, Spar Road intersection	1600 to 1659	149	990

VOC Monitoring

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