

Dust Monitoring Summary Report

Toronto Transit Commission

Ashbridges Bay LFLRV Maintenance and Storage Facilities

Monitoring Period: 6 Sep - 12 Sep, 2011

Dust (PM₁₀) Monitoring Results

PM₁₀ : Particulate Matter, less than 10 micrometres in diameter.

µg/m³ : Micrograms per cubic metre;
a unit of measure for concentration in air.

Date	24 Hour Average, All Stations		Station(s) Where 24h Average >50 µg/m ³ ^(1,2)	Predominant Wind Direction	Comments
	Minimum (µg/m ³)	Maximum (µg/m ³)			
6-Sep-11	2	100	Dust 3, 4, 8	NW	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 3,4) indicative of PM ₁₀ from off-site.
7-Sep-11	1	116	Dust 1, 3, 4, 8	NNW	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 3,4) indicative of PM ₁₀ from off-site.
8-Sep-11	4	121	Dust 1, 3, 4, 8	NNW	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 3,4) indicative of PM ₁₀ from off-site.
9-Sep-11	12	137	Dust 1, 2, 3, 4, 8	NW / SSE	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 2,3,4) indicative of PM ₁₀ from off-site.
10-Sep-11	5	130	Dust 1, 2, 3, 4, 8	NNW	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 2,3,4) indicative of PM ₁₀ from off-site.
11-Sep-11	6	141	Dust 1, 2, 3, 4, 8	NNW / ENE	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 2,3,4) indicative of PM ₁₀ from off-site.
12-Sep-11	46	112	Dust 1, 2, 3, 4, 6, 7, 8	S	Potential influences from both off-site and on-site sources. Elevated concentrations at upwind stations (Dust 1,8) indicative of PM ₁₀ from off-site.

¹ 50 µg/m³ is the interim Ontario Ministry of the Environment Ambient Air Quality Criteria (AAQC).

² Ellis-Don/SPL Beatty has indicated that Dust #4 was out of calibration prior to Sept 28th, which may have resulted in 24 hour averages above 50 µg/m³ at this location.

Wind direction is reported by the direction from which it originates.

Data were collected from eight (8) dust monitoring stations equipped with TSI DustTrak DRX Aerosol Monitors that measure airborne fine particulate matter (PM₁₀).

The monitors are located along the perimeter of the excavation area for the purpose of monitoring on site dust levels during the excavation activities.

Ellis-Don/SPL Beatty have provided this data under contract to TTC. In cases where exceedances are measured, additional dust control measures are applied.

Dust Monitoring Summary Report

Toronto Transit Commission

Ashbridges Bay LFLRV Maintenance and Storage Facilities

Monitoring Period: 13 Sep - 19 Sep, 2011

Dust (PM₁₀) Monitoring Results

PM₁₀ : Particulate Matter, less than 10 micrometres in diameter.

µg/m³ : Micrograms per cubic metre;
a unit of measure for concentration in air.

Date	24 Hour Average, All Stations Minimum Maximum (µg/m ³) (µg/m ³)		Station(s) Where 24h Average >50 µg/m ³ ^(1,2)	Predominant Wind Direction	Comments
13-Sep-11	36	82	Dust 1, 2, 3, 4, 8	S / W	Potential on-site sources.
14-Sep-11	6	59	Dust 4	WSW	Potential on-site sources.
15-Sep-11	0	41	-	W	
16-Sep-11	1	40	-	W	
17-Sep-11	0	47	-	NW	
18-Sep-11	0	48	-	NW / NE	
19-Sep-11	7	157	Dust 3, 4	ESE	Contractor has indicated that the high readings at DUST 3 and 4 are attributable to the monitors requiring recalibration.

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