

# Dust Monitoring Summary Report

## Toronto Transit Commission Ashbridges Bay LFLRV Maintenance and Storage Facilities

**Monitoring Period:** 1 Oct - 7 Oct, 2011

### Dust (PM10) Monitoring Results

**PM10** : Particulate Matter, less than 10 micrometres in diameter.  
**µg/m<sup>3</sup>** : 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 <sup>3</sup> *	Predominant Wind Direction	Comments
	Minimum (µg/m <sup>3</sup> )	Maximum (µg/m <sup>3</sup> )			
1-Oct-11	0	37	-	NW	
2-Oct-11	0	1	-	NW	Rainfall Event (>5 mm)
3-Oct-11	0	6	-	WNW	Rainfall Event (>5 mm)
4-Oct-11	2	9	-	WNW	
5-Oct-11	3	30	-	variable	
6-Oct-11	3	34	-	W / ESE	
7-Oct-11	12	38	-	WNW	

\* 50 µg/m<sup>3</sup> is the interim Ontario Ministry of the Environment Ambient Air Quality Criteria (AAQC).

There was no data reported from DUST 3 or DUST 4 for this period; DUST 3 was not operational, and the data from DUST 4 was deemed erroneous.

The 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:** 8 Oct - 14 Oct, 2011

## Dust (PM10) Monitoring Results

**PM10** : Particulate Matter, less than 10 micrometres in diameter.  
**µg/m<sup>3</sup>** : 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 <sup>3</sup> *	Predominant Wind Direction	Comments
	Minimum (µg/m <sup>3</sup> )	Maximum (µg/m <sup>3</sup> )			
8-Oct-11	10	41	-	variable	
9-Oct-11	32	57	Dust 1, 6	SSE / WNW	Potential influences from both off-Site and on-Site sources.
10-Oct-11	25	52	Dust 6	SSE / WNW	Potential influences from both off-Site and on-Site sources.
11-Oct-11	38	72	Dust 1, 5, 6, 7	NNE	Rainfall event (>5 mm) Potential influences from both off-Site and on-Site sources.
12-Oct-11	1	17	-	NNE	Rainfall event (>5 mm)
13-Oct-11	0	8	-	NNE / ENE	
14-Oct-11	1	17	-	SW	

\* 50 µg/m<sup>3</sup> is the interim Ontario Ministry of the Environment Ambient Air Quality Criteria (AAQC).

There was no data reported from DUST 3 or DUST 4 for this period; DUST 3 was not operational, and the data from DUST 4 was deemed erroneous.

The 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.

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# Dust Monitoring Summary Report

## Toronto Transit Commission Ashbridges Bay LFLRV Maintenance and Storage Facilities

**Monitoring Period:** 15 Oct - 21 Oct, 2011

### Dust (PM10) Monitoring Results

**PM10** : Particulate Matter, less than 10 micrometres in diameter.  
**µg/m<sup>3</sup>** : 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 <sup>3</sup> *	Predominant Wind Direction	Comments
	Minimum (µg/m <sup>3</sup> )	Maximum (µg/m <sup>3</sup> )			
15-Oct-11	0	28	-	SSW	
16-Oct-11	1	38	-	SSW	
17-Oct-11	5	116	Dust 1	SSW	Potential influences from off-Site and on-Site sources.
18-Oct-11	10	78	Dust 1, 6	SSW / NNE	Potential influences from both off-Site and on-Site sources.
19-Oct-11	0	62	Dust 1	NNE	Rainfall Event (>5 mm) Potential off-Site sources.
20-Oct-11	0	56	Dust 1	NNE / SSE	Rainfall Event (>5 mm) Potential influences from both off-Site and on-Site sources.
21-Oct-11	0	64	Dust 1	WSW	Potential on-Site sources.

\* 50 µg/m<sup>3</sup> is the interim Ontario Ministry of the Environment Ambient Air Quality Criteria (AAQC).

DUST 3 was offline on Oct 15<sup>th</sup> and 16<sup>th</sup>, and DUST 2,3,and 4 were all offline on Oct 20<sup>th</sup>.

Dust 4 data was deemed erroneous for Oct 15<sup>th</sup> to 17<sup>th</sup>, and was offline between Oct 18<sup>th</sup> and 20<sup>th</sup>.

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.

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# Dust Monitoring Summary Report

## Toronto Transit Commission Ashbridges Bay LFLRV Maintenance and Storage Facilities

**Monitoring Period:** 22 Oct - 28 Oct, 2011

### Dust (PM10) Monitoring Results

**PM10** : Particulate Matter, less than 10 micrometres in diameter.  
**µg/m<sup>3</sup>** : 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 <sup>3</sup> *	Predominant Wind Direction	Comments
	Minimum (µg/m <sup>3</sup> )	Maximum (µg/m <sup>3</sup> )			
22-Oct-11	2	65	Dust 1	SW	Potential on-Site sources.
23-Oct-11	12	86	Dust 1, 7	NE	Potential influences from both off-Site and on-Site sources. Upwind station (Dust 1) suggests impacts related to adjacent construction activities at waste water treatment plant.
24-Oct-11	4	75	Dust 1	SSE / SW	Potential on-Site sources.
25-Oct-11	5	71	Dust 1	SW	Rainfall Event (>5 mm), Potential influences from both off-Site and on-Site sources.
26-Oct-11	0	58	Dust 1	NNE	Rainfall Event (>5 mm), Potential influences from off-Site sources.
27-Oct-11	1	58	Dust 1, 7	NW	Potential influences from both off-Site and on-Site sources.
28-Oct-11	7	66	Dust 1, 7	SSE / WNW	Potential influences from both off-Site and on-Site sources.

\* 50 µg/m<sup>3</sup> is the interim Ontario Ministry of the Environment Ambient Air Quality Criteria (AAQC).

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.