



**Long-term Evaluation Of The Air Pollutant Concentrations At**  
**Exito Industrial Site Gauteng**

**This report covers the period from September 2015 up to September 2016**

Compiled by: David Otto  
For and on Behalf Of: Exito Environmental Projects cc

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This report can be referred to as "Otto, D.C. Sept 2015-Sept 2016 – Long-term Evaluation Of The Air Pollutant Concentrations At Exito Industrial Site – Gauteng, p1 - 6."

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## Results

**Table 1: Fallout Dust Results**

### Dust Fall-out Monitoring - Exito Environmental

#### Exito Industrial Site

mg/m<sup>2</sup>/day

Fallout Measurements Per Point



Period	EXI 1	EXI 2	EXI 3	EXI 4	EXI 5	EXI 6	EXI 7	EXI 8
02 Sep - 05 Oct 2015	665.3	5977.4	633.1	2110.1	973.5	2229.1	2070.2	884.8
05 Oct - 03 Nov 2015	1331	6303.1	1386.7	1404.5	1953	2474.9	3008.9	1440.9
03 Nov - 30 Nov 2015	1230.5	9127	1879.2	2867	764.5	1907.7	2170.1	1107.3
30 Nov - 13 Jan 2016	307.9	328.8	578.9	3481.2	236.2		558.4	153.7
13 Jan - 03 Feb 2016	1417.3	757.3	1154.2	1865.1	1647.2	2069.7	2596.5	1329.6
03 Feb - 01 Mar 2016	1085.3	1021.2	1079.1	1786.5	1173.2	1967	2448.6	1601.4
01 Mar - 04 Apr 2016	1005.3	11196.1	1273.8	1582.4	1034.1	2041	1241.9	1149.2
04 Apr - 05 May 2016	258.7	5431.3	934.1	1072.9	807.9	1640.2	2186.7	909.7
05 Jun - 04 Jul 2016	1239.2	1794.5	1265.6	1058.4		1983.9	5522.6	1142.5
05 Jun - 05 Jul 2016	657	1917.3	725.6	858.3	538	657.2	3130.2	521.8
04 Jul - 04 Aug 2016		165.5	1002.6	1689.2	768.1	1718	724.5	1233.7
04 Aug - 05 Sep 2016	272.967	575.2964	467.7206	727.5655	781.2234	1591.9392	1823.7208	816.0426
Overall Average	789.2056	3716.233	1031.7184	1708.5971	889.7436	1690.0533	2290.1934	1024.2202
Latest 2-Month Average	136.4835	370.3982	735.1603	1208.3827	774.6617	1654.9696	1274.1104	1024.8713

Restriction Areas	Dustfall Rate (D) mg/m <sup>2</sup> /day 30-day Average	Permitted frequency of exceeding dust fall rate
Residential	D < 600	Two within one year, but not sequential months
Non-Residential	D < 1200	Two within one year, but not sequential months

## Discussion On Results

### Fallout

The dust fallout results shows that results from EXI 1,2,and 3 are all in the band "Heavy -Action" for this period. Points EXI 4,5,6,7 and 8 all fall within the "Very Heavy-Alert" band. Dust abatement technologies needs to be implemented at this site and reporting to authorities is necessary.

Report Prepared By  
Roelof Van Rooyen

Report Reviewed and Authorized By:

**David Otto**

**Figure 1: Fall-out Dust Concentrations Showing All Of The Monthly Results**

**Exito Environmental Projects cc.**

Exito Industrial Site - 8 Measurement Points

Dust Fall-out and 3-Month rolling average - All points

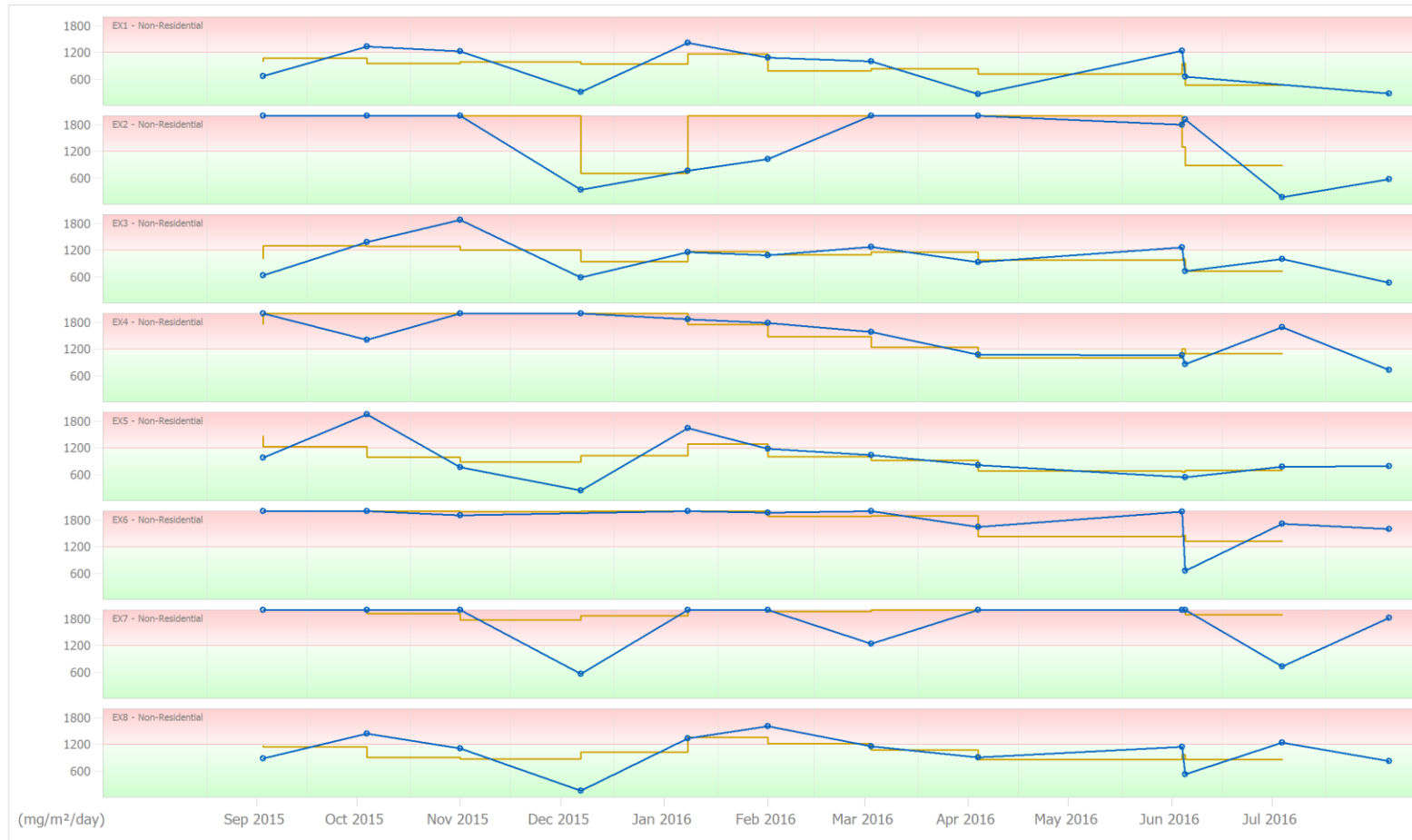
—●— Fallout Rate  
 — Rolling Average  
 (mg/m<sup>2</sup>/day)



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**Figure 2: Fall-out dust concentrations showing a 3-month rolling average of the results**

**Exito Environmental Projects cc.**

Exito Industrial Site - 8 Measurement Points

Dust Fall-out and 3-Month rolling average - All points





**Figure 3: Fall-out Dust Concentrations Showing the Results For EX1 1 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EX1 1 (Non-Residential)

Dust Fall-out and 3-Month rolling averages



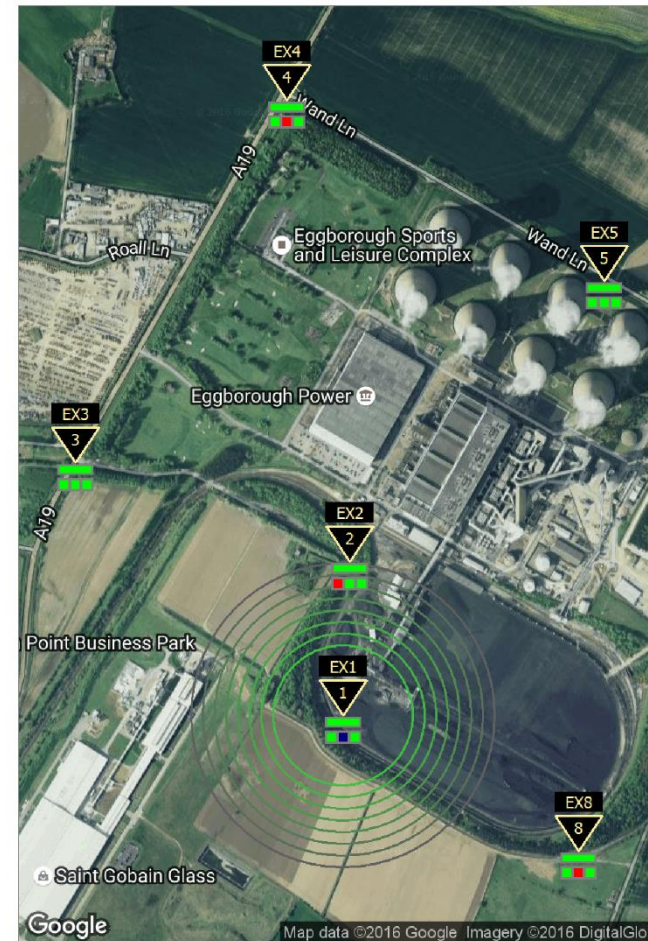
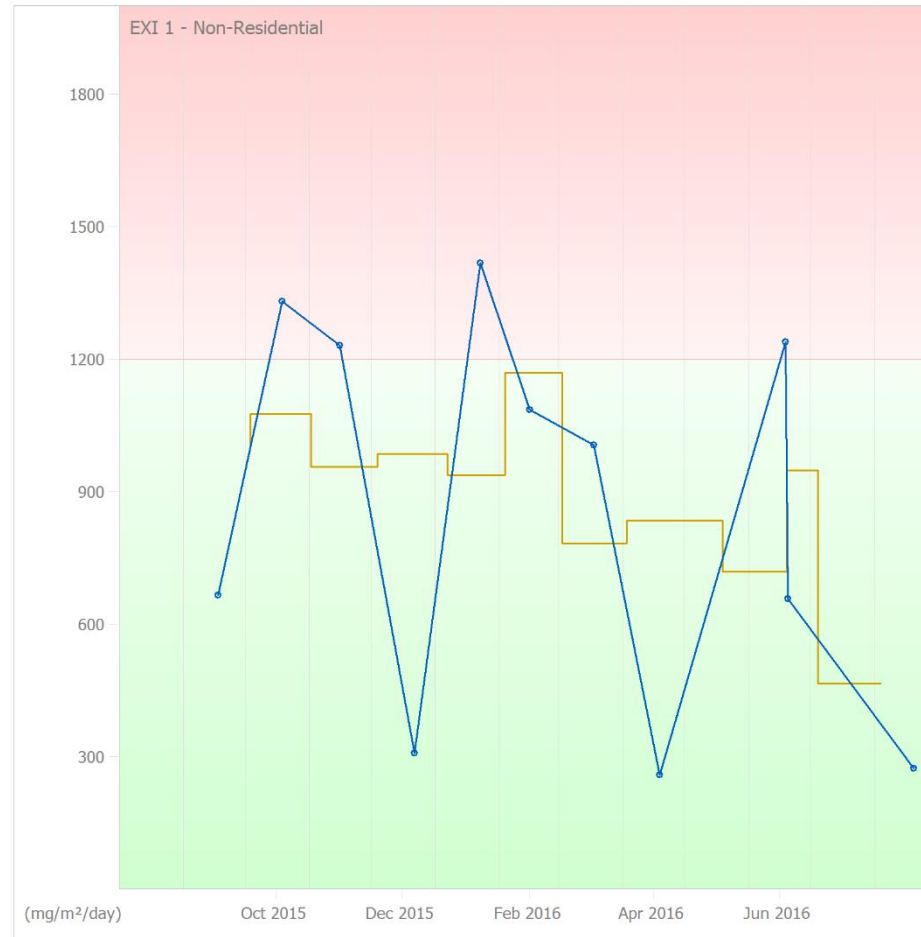
Fallout Rate  
Rolling Average



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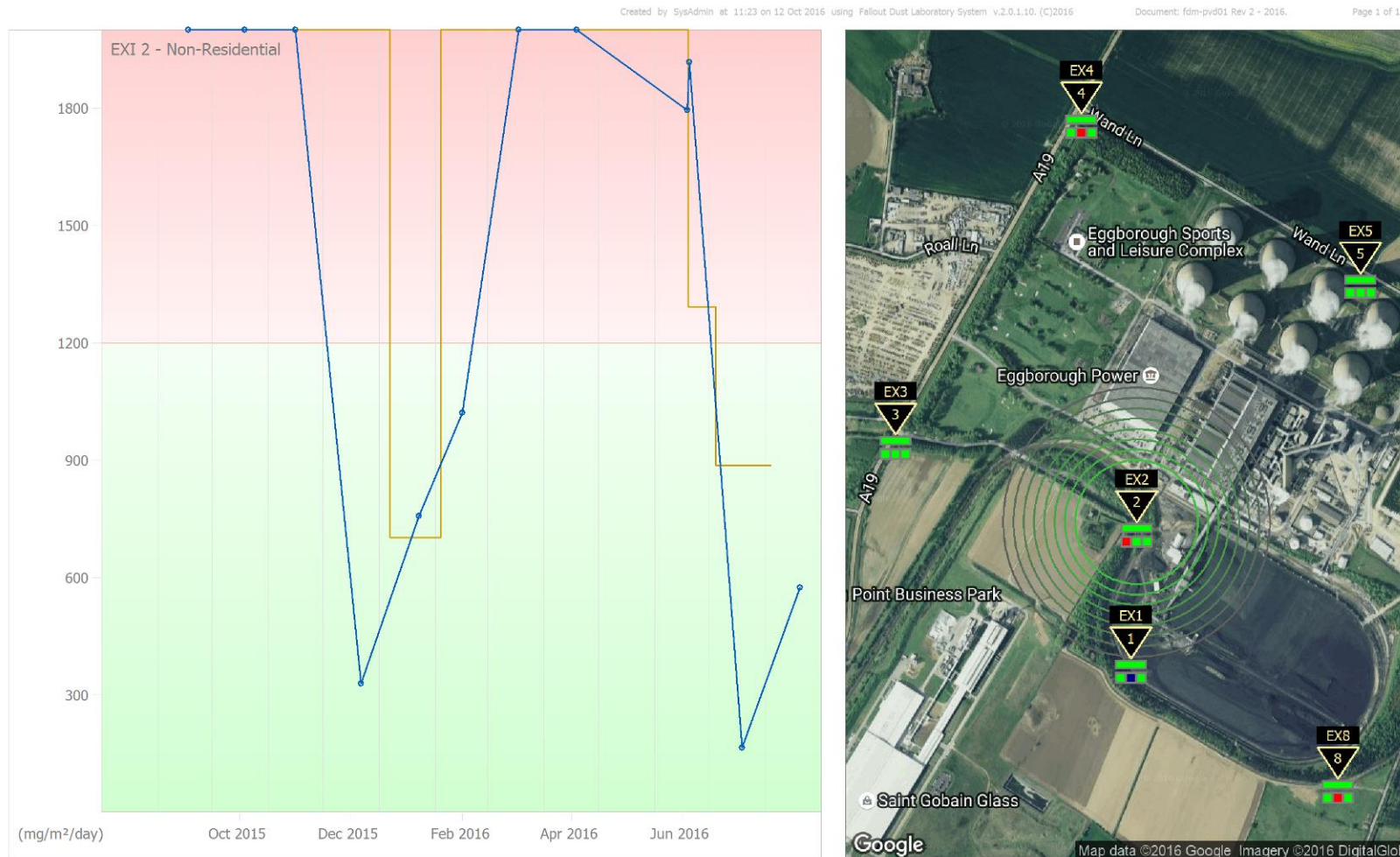
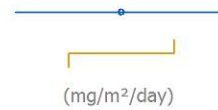


**Figure 4: Fall-out Dust Concentrations Showing the Results for EXI 2 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 2 (Non-Residential)

Dust Fall-out and 3-Month rolling averages



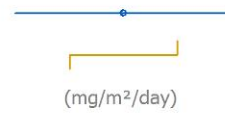


**Figure 5: Fall-out Dust Concentrations Showing the Results for EXI 3 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 3 (Non-Residential)

Dust Fall-out and 3-Month rolling averages



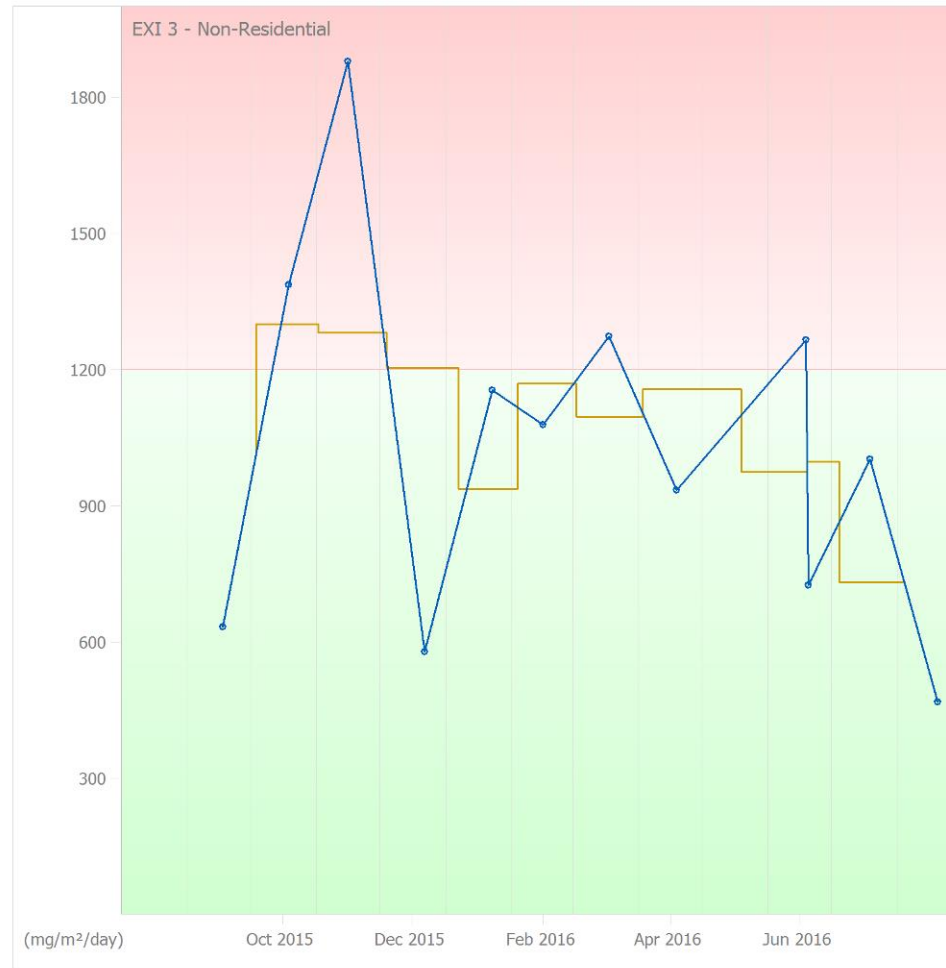
Fallout Rate  
Rolling Average



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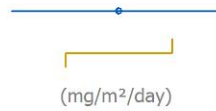


**Figure 6: Fall-out Dust Concentrations Showing the Results for EXI 4 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 4 (Non-Residential)

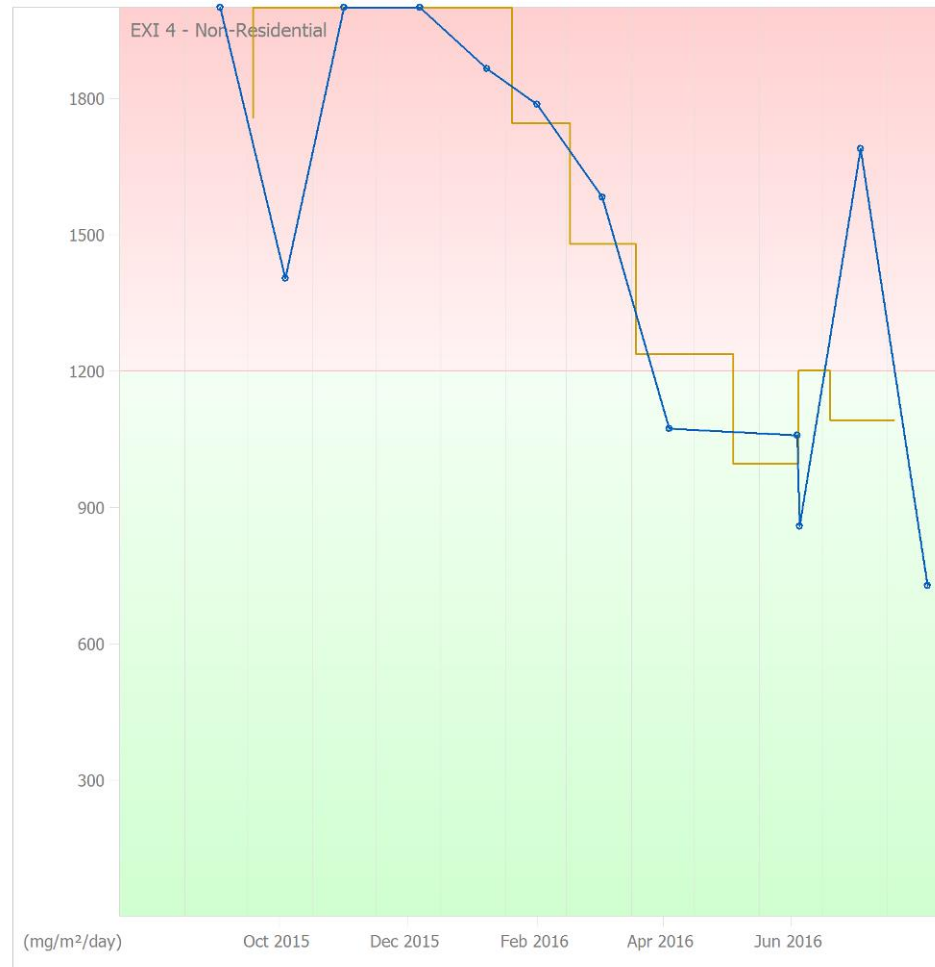
Dust Fall-out and 3-Month rolling averages



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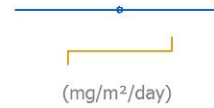


**Figure 7: Fall-out Dust Concentrations Showing the Results for EXI 5 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 5 (Non-Residential)

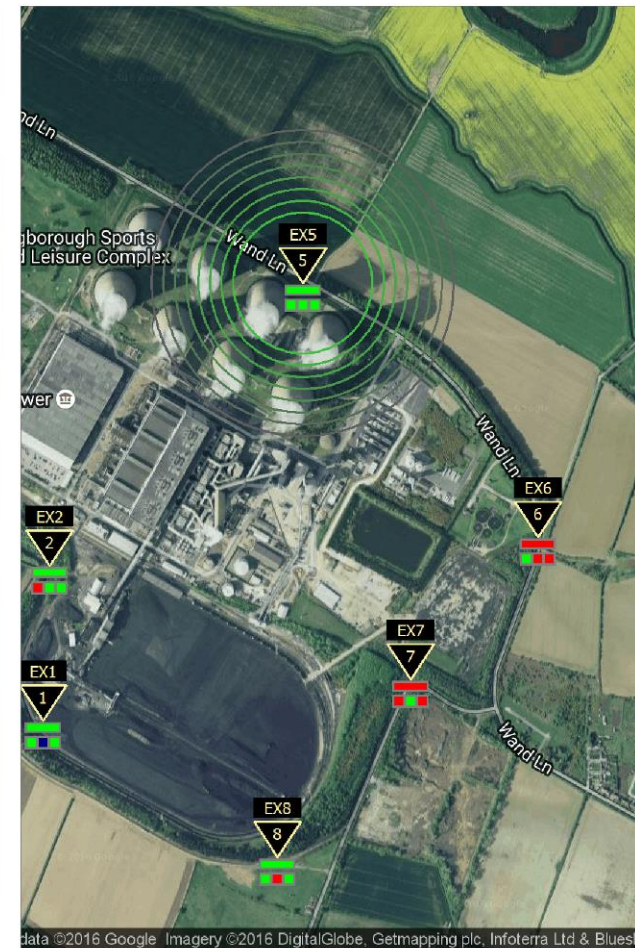
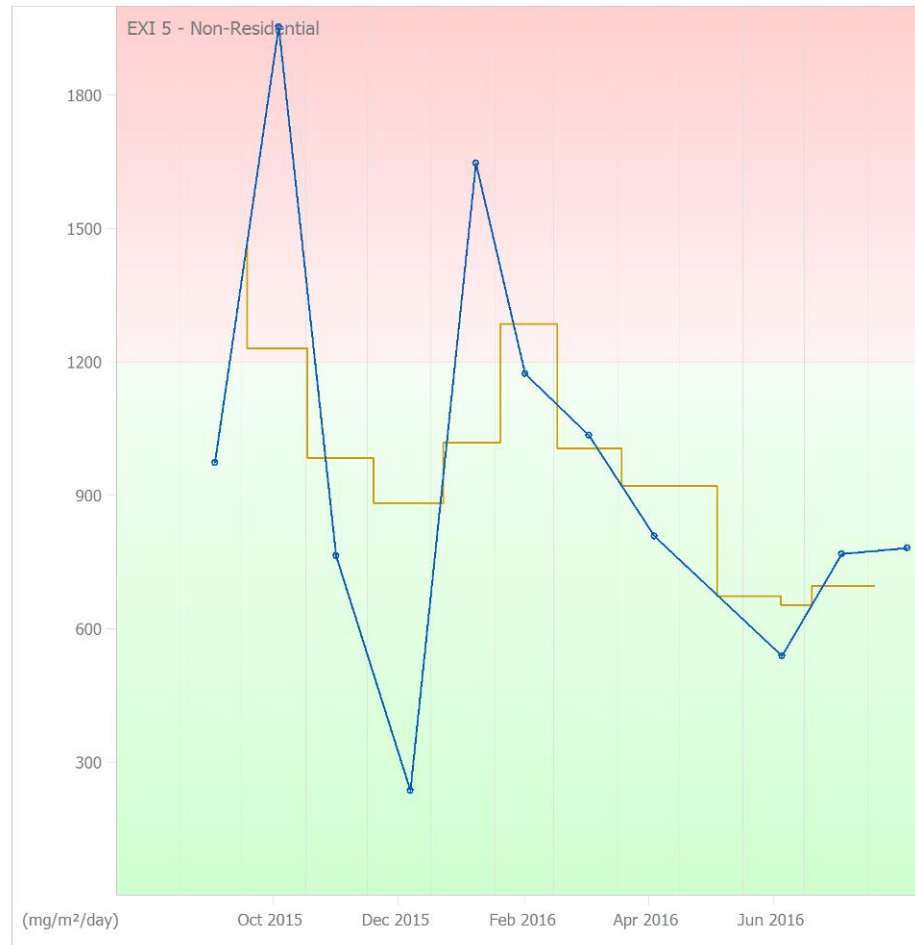
Dust Fall-out and 3-Month rolling averages



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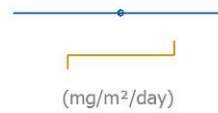


**Figure 8: Fall-out Dust Concentrations Showing the Results for EXI 6 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 6 (Non-Residential)

Dust Fall-out and 3-Month rolling averages



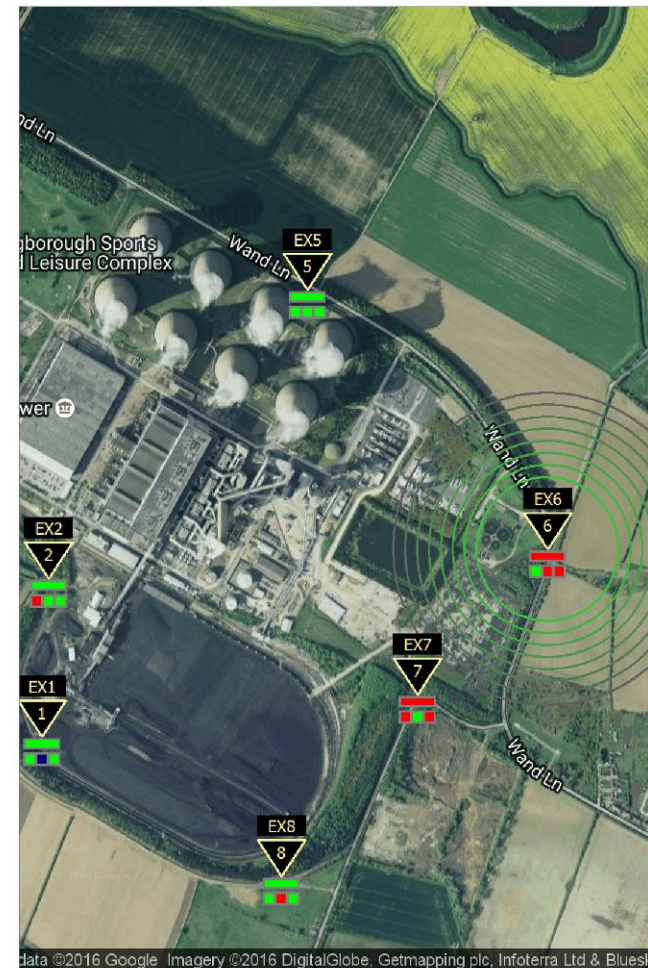
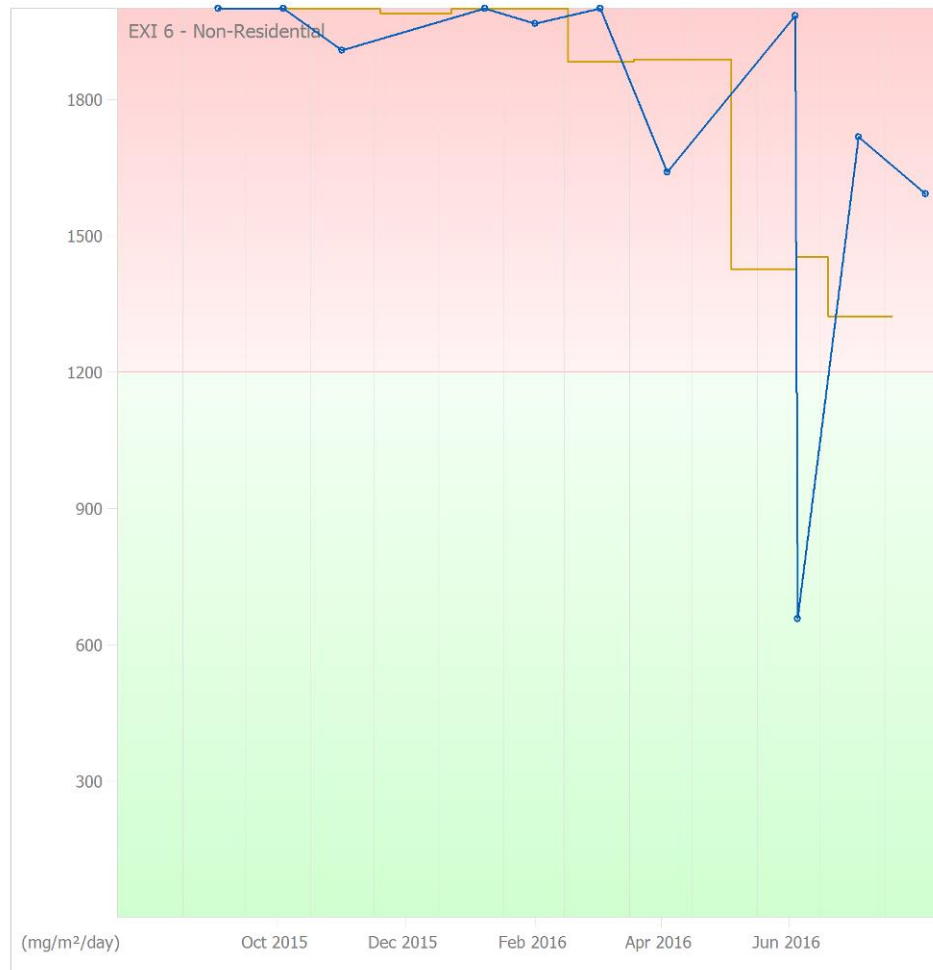
Fallout Rate  
Rolling Average



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**Figure 9: Fall-out Dust Concentrations Showing the Results for EXI 7 with Rolling 3-Month Averages**

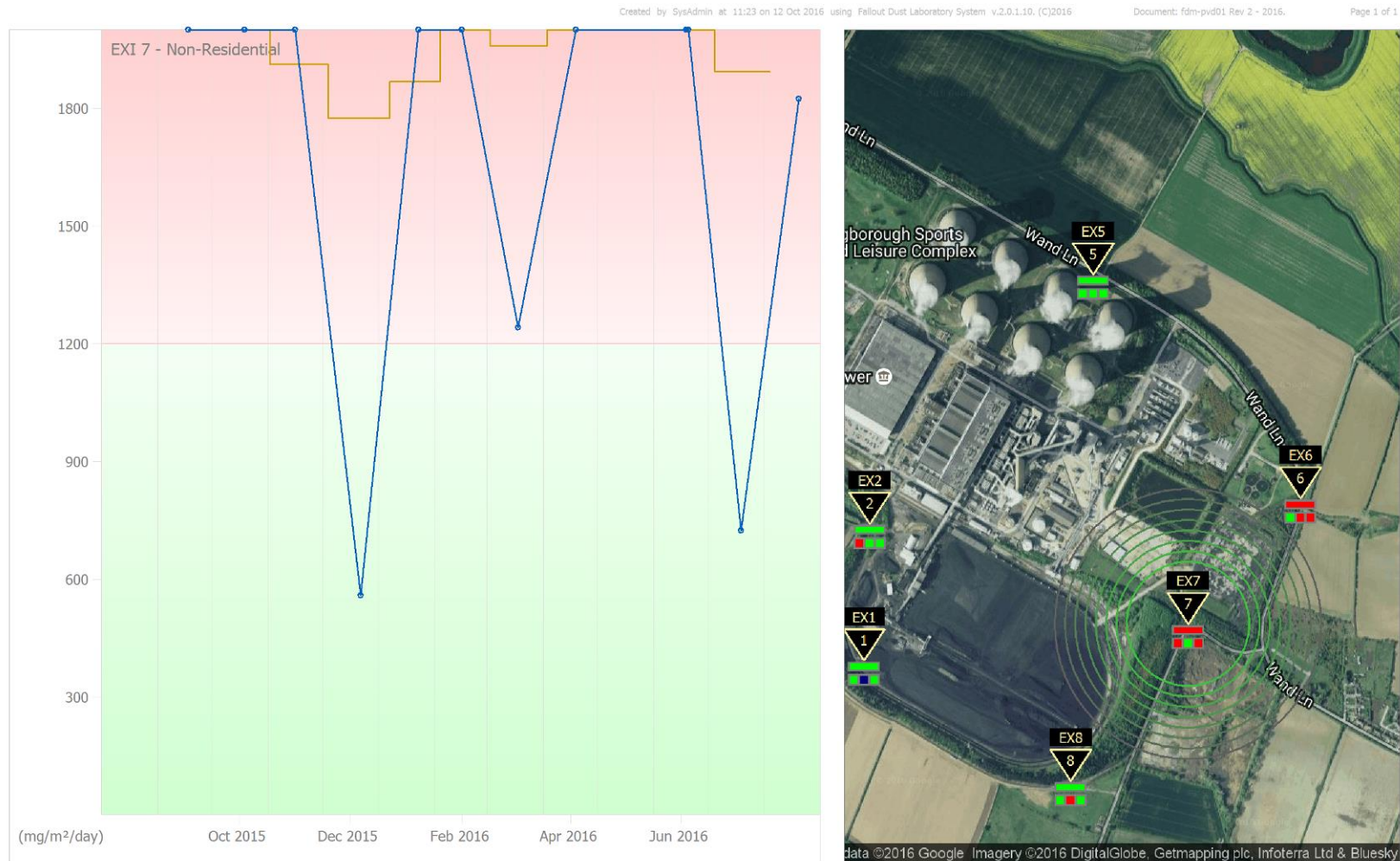
**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 7 (Non-Residential)

Dust Fall-out and 3-Month rolling averages



Fallout Rate  
Rolling Average





**Figure 10: Fall-out Dust Concentrations Showing the Results for EXI 8 with Rolling 3-Month Averages**

**Exito Environmental Projects cc.**

Exito Industrial Site - EXI 8 (Non-Residential)

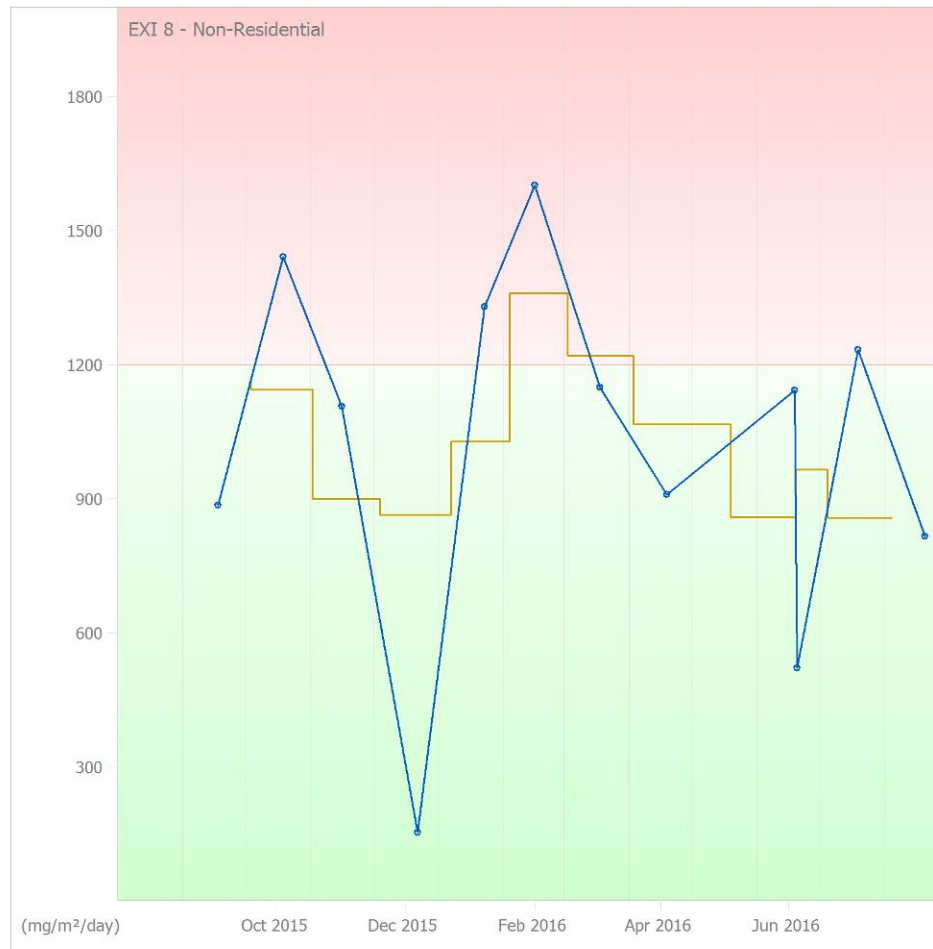
Dust Fall-out and 3-Month rolling averages



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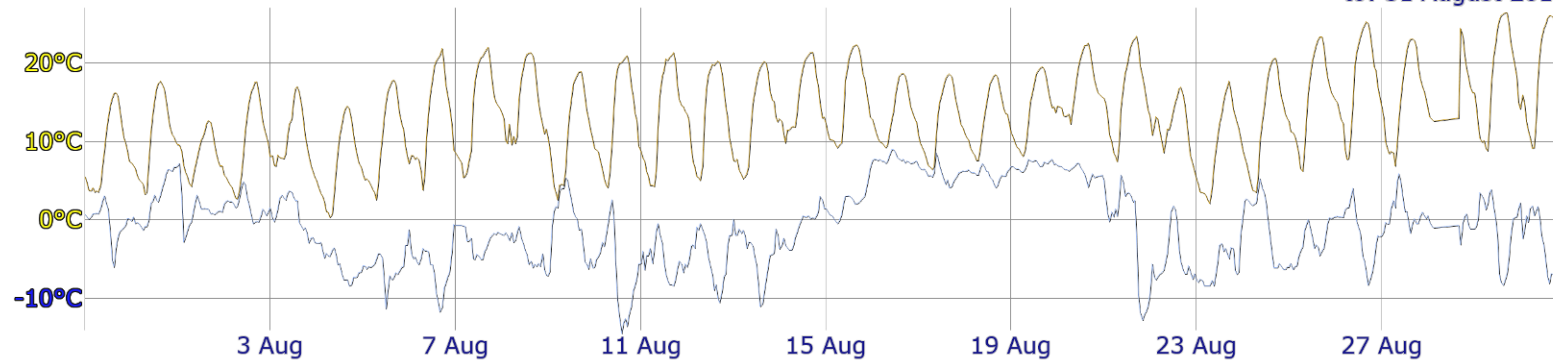


## Weather Data

### Weather Report - Exito Industrial Site - Temperature

**Max Temp: 26.4°C**  
**Avg Temp: 13.2°C**  
**Min Temp: 0.3°C**

Legend:  
**Ambient Temperature (°C)**  
**Dew-Point Temperature (°C)**  
From: 30 July  
to: 31 August 2016



### Rainfall

**Total Rainfall: 0.0mm**  
**Max Rainfall on: Sat 30 Jul (0.0mm)**  
**Rainy Days: 0**  
**Daily Avg Rainfall: 0.0mm**  
**Avg Humidity: 43.4%**

Legend:  
**Cumulative Rainfall (mm)**  
**Humidity (% RH)**  
From: 30 July  
to: 31 August 2016

