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# Annual Air Quality Information, 2011

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Dublin Airport

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HSSE Department

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## INTRODUCTION

Dublin Airport Authority (DAA) carries out extensive ambient air monitoring at Dublin Airport and the surrounding area. DAA operate an air monitoring station on site at the airport and carry out diffusion tube monitoring in the surrounding areas. A list of these locations is presented in the table and map below.

This report presents a summary of the air quality results for a range of air quality parameters in 2011. The parameters include benzene, nitrogen dioxide (NO<sub>2</sub>); sulphur dioxide (SO<sub>2</sub>) and particulate matter of diameter less than 10 microns (PM<sub>10</sub>)

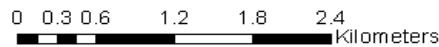
For comparison purposes the Ambient Air Quality Standards Regulations 2011 (SI 180 of 2011) are referenced. The Air Quality Standards Regulations do not require individual companies or operators to carry out air monitoring or compare the results with limit values specified in the Air Quality Standards Regulations. Monitoring for compliance with the Regulations is the responsibility of local authorities and is supervised by the competent authority under the Regulations, the EPA. The results of the DAA monitoring programme are compared with the limit values contained within the Regulations as a means of illustrating the general air quality at each location and not as a measure of compliance.

<b>Table 1 – List of Ambient Air Monitoring Locations</b>			
<b>Reference</b>	<b>Location</b>	<b>Passive Tubes</b>	<b>Continuous Analysers</b>
A0	Dummy site representing calibration off site	-	
A1	Forrest Little Golf Club	✓	
A2	Kilreesk Lane, St. Margaret's	✓	
A3	Ridgewood Estate West, Swords	✓	
A4	St. Margaret's School & Parish House	✓	✓
A5	Fire Station, Huntstown, Dublin Airport	✓	
A6	Eastern Boundary Fence, Dublin Airport	✓	
A7	Western Boundary Fence, Dublin Airport	✓	
A8	St. Nicholas of Myra School, Malahide Road	✓	
A9	Naomh Mearnóg GAA Club, Portmarnock	✓	
A10	Oscar Papa Site, Portmarnock	✓	
A11	Castlemoate House, Dublin Airport	✓	
A12	Clonshaugh Estate, Clonshaugh	✓	
A13	Airside Business Park, Nevinstown, Swords	✓	
A14	Old fire training ground, Barberstown, Dublin Airport	✓	
	DAA Monitoring Station; Located East of Castlemoate House		✓

**TITLE**  
**AMBIENT AIR QUALITY MONITORING SITES FOR DUBLIN AIRPORT**



**Legend**  
Monitoring Locations

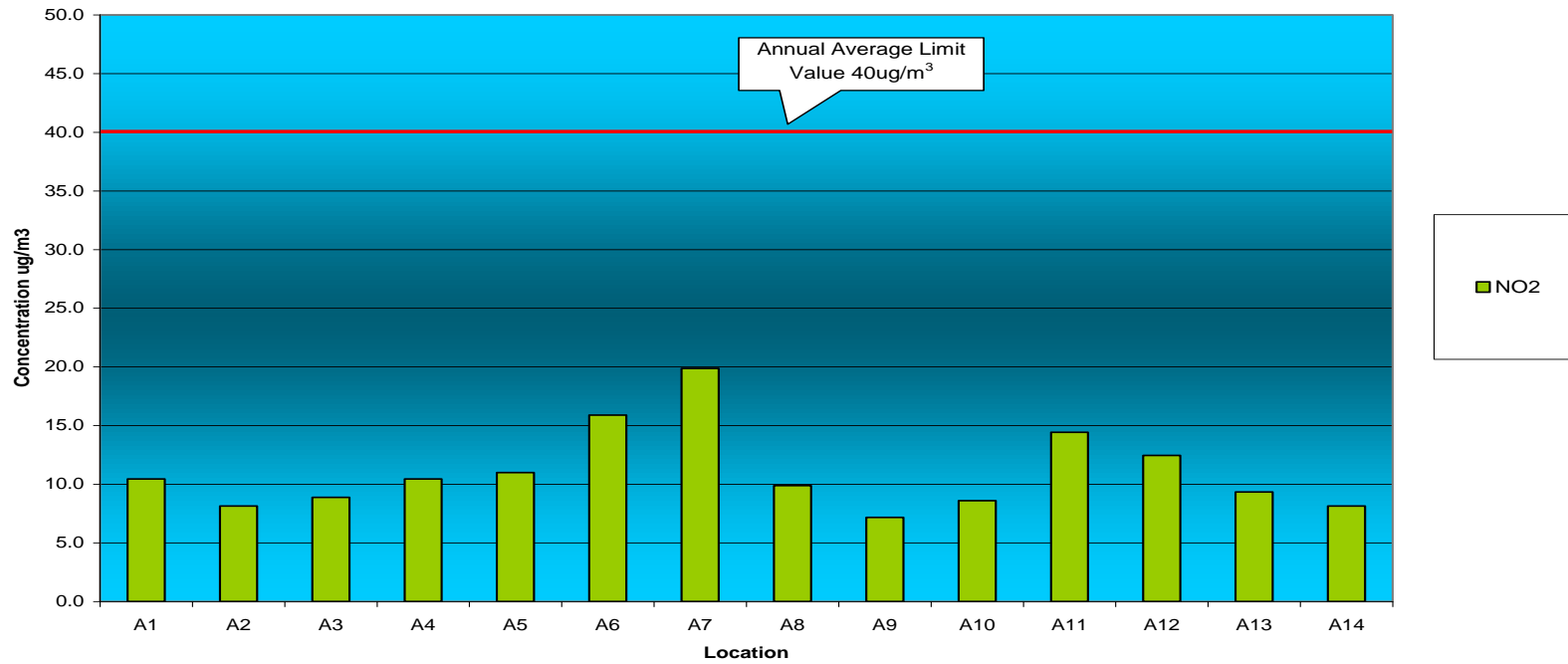


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<b>Drawn By:</b>	AM	Drawing No.:	DA A1
<b>Approved By:</b>	AM	Rev. No.:	Rev1
<b>Scale:</b>	As Shown		

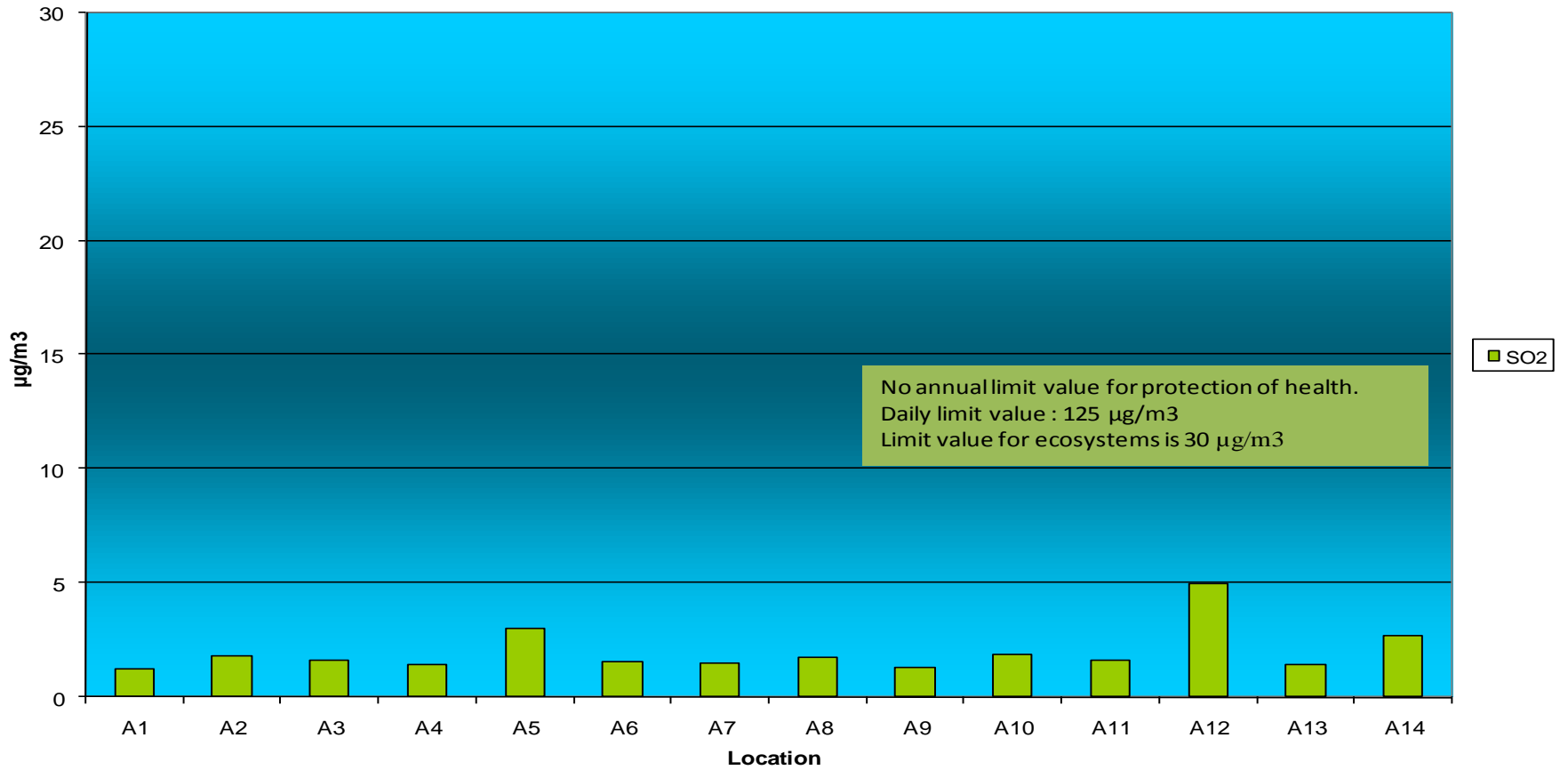


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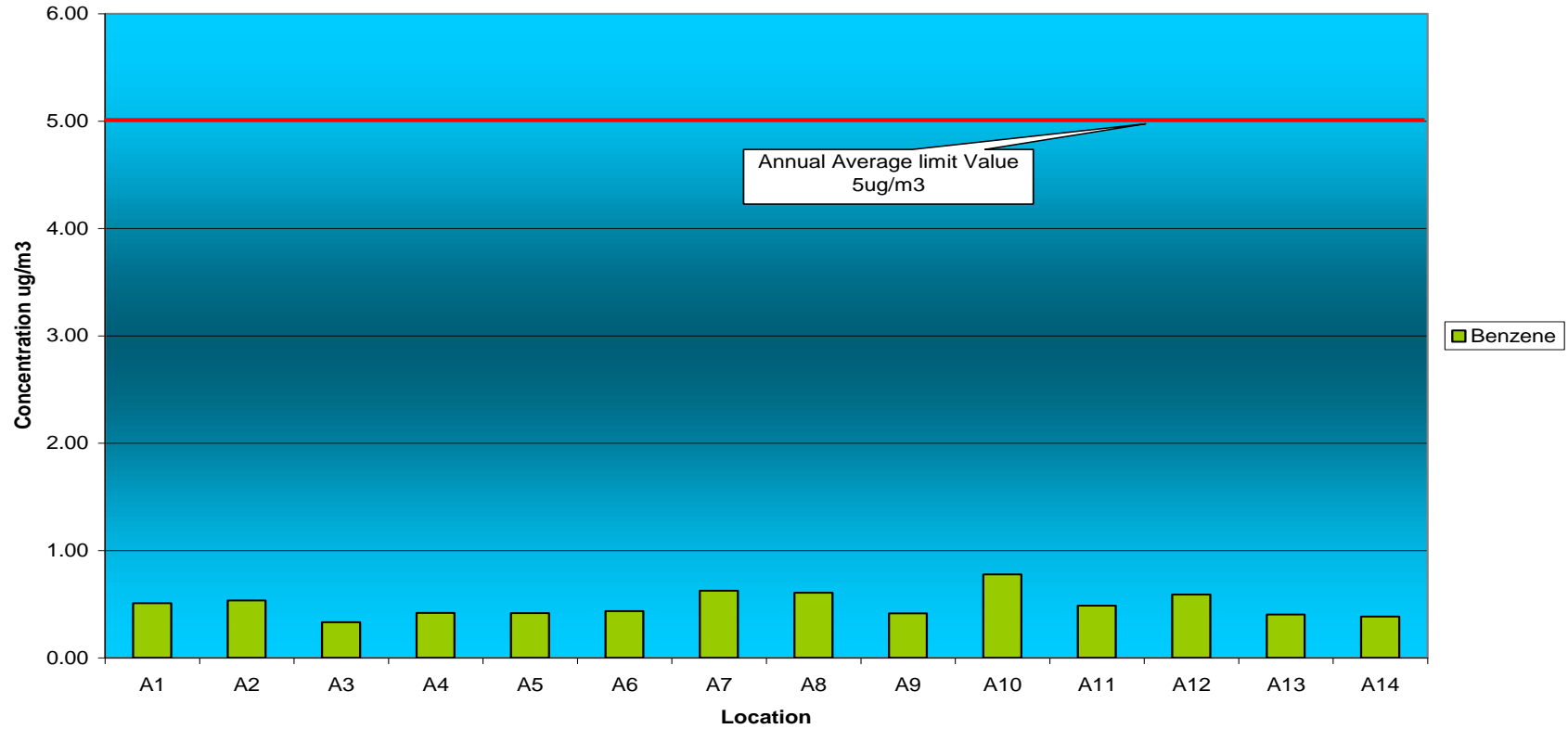
Annual Nitrogen Dioxide Concentrations by Passive Diffusion Tube



### 2011 Annual Average SO2 Concentrations

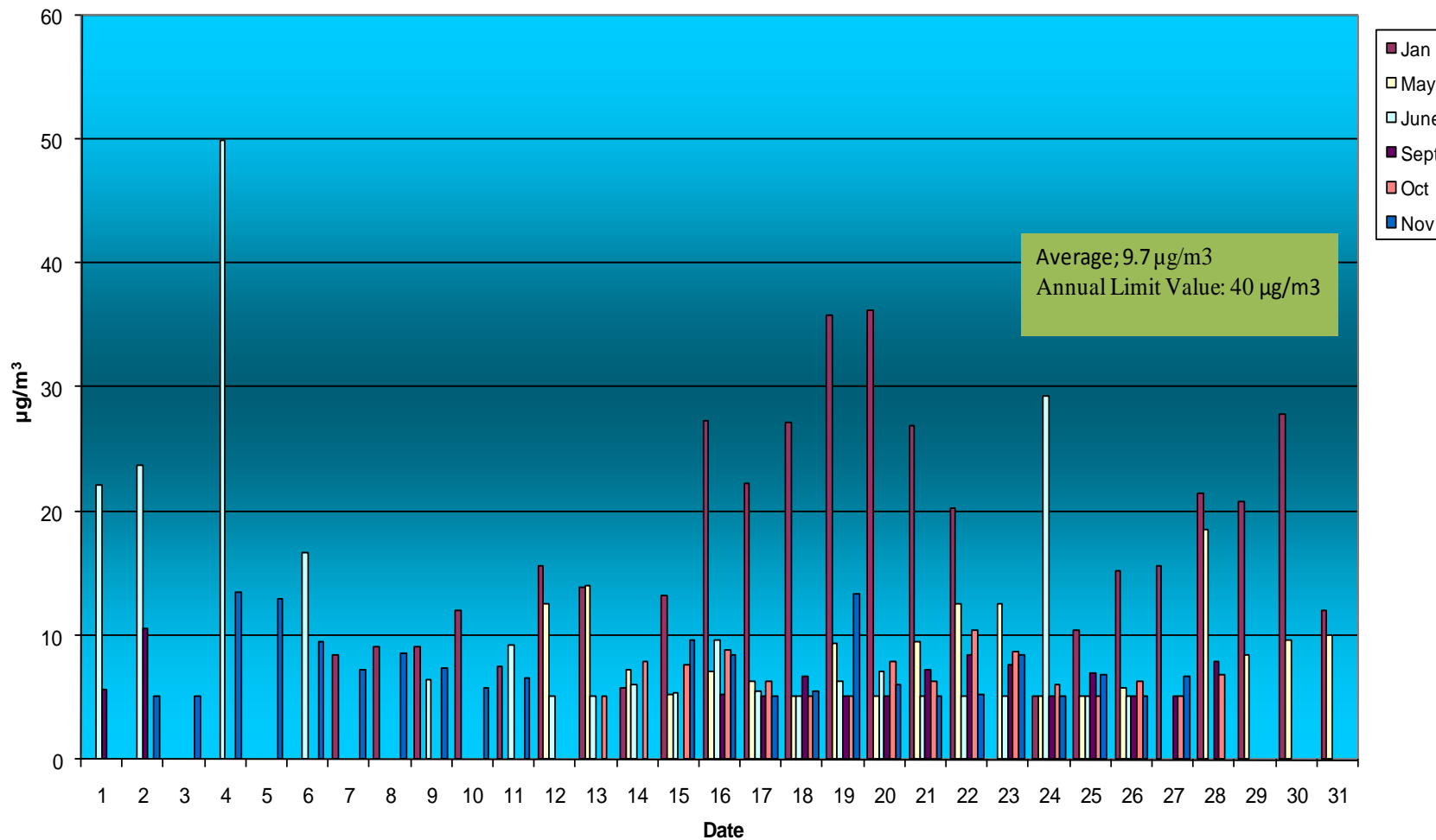


Annual Benzene Concentration by Passive Diffusion Tube



Daily average PM10 concentrations at St. Margaret's, 2011

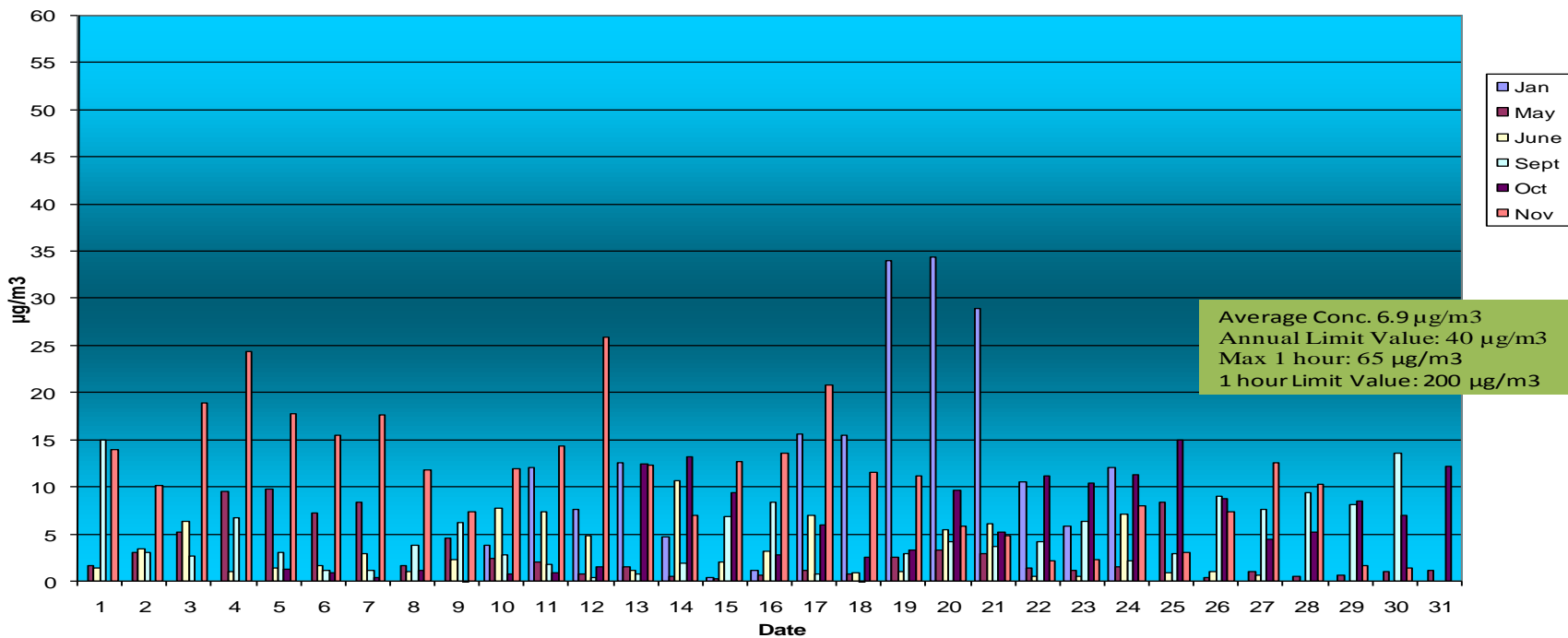
A4 PM10 Conc. 2011





Daily average nitrogen dioxide concentrations at St. Margaret's in 2011

A4 Average Daily NO<sub>2</sub> Conc. 2011



# Airport Monitoring Station Results 2011

**Note: Based on data for period June to December 2011: Air Station was out of operation for large periods of Jan to May 2011. This was due to a change in location and the required infrastructure installation at new location.**

Figure 2.1.: Average Daily nitrogen dioxide concentrations June to December 2011

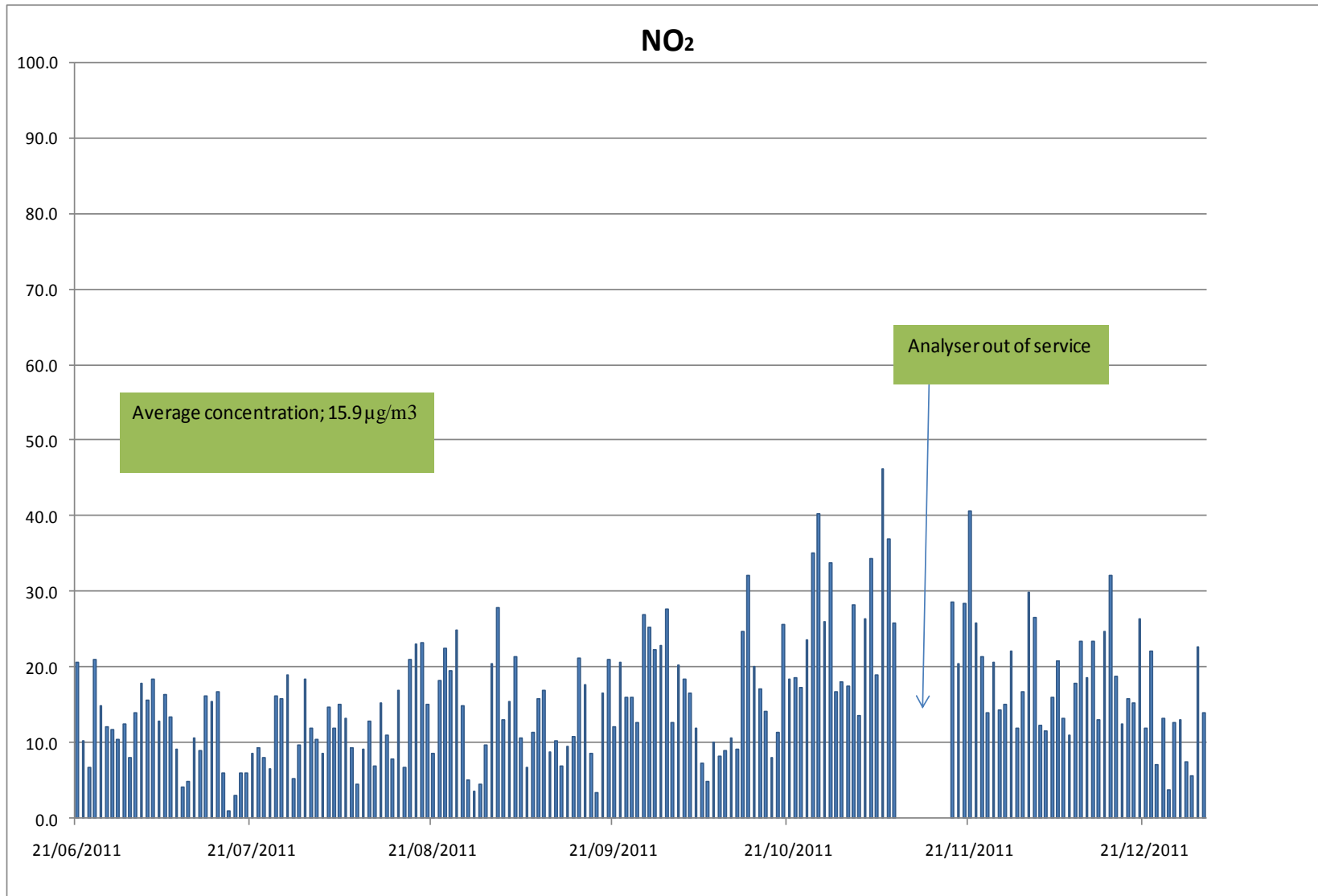


Figure 2.2: Average daily PM<sub>10</sub> concentrations June to December 2011

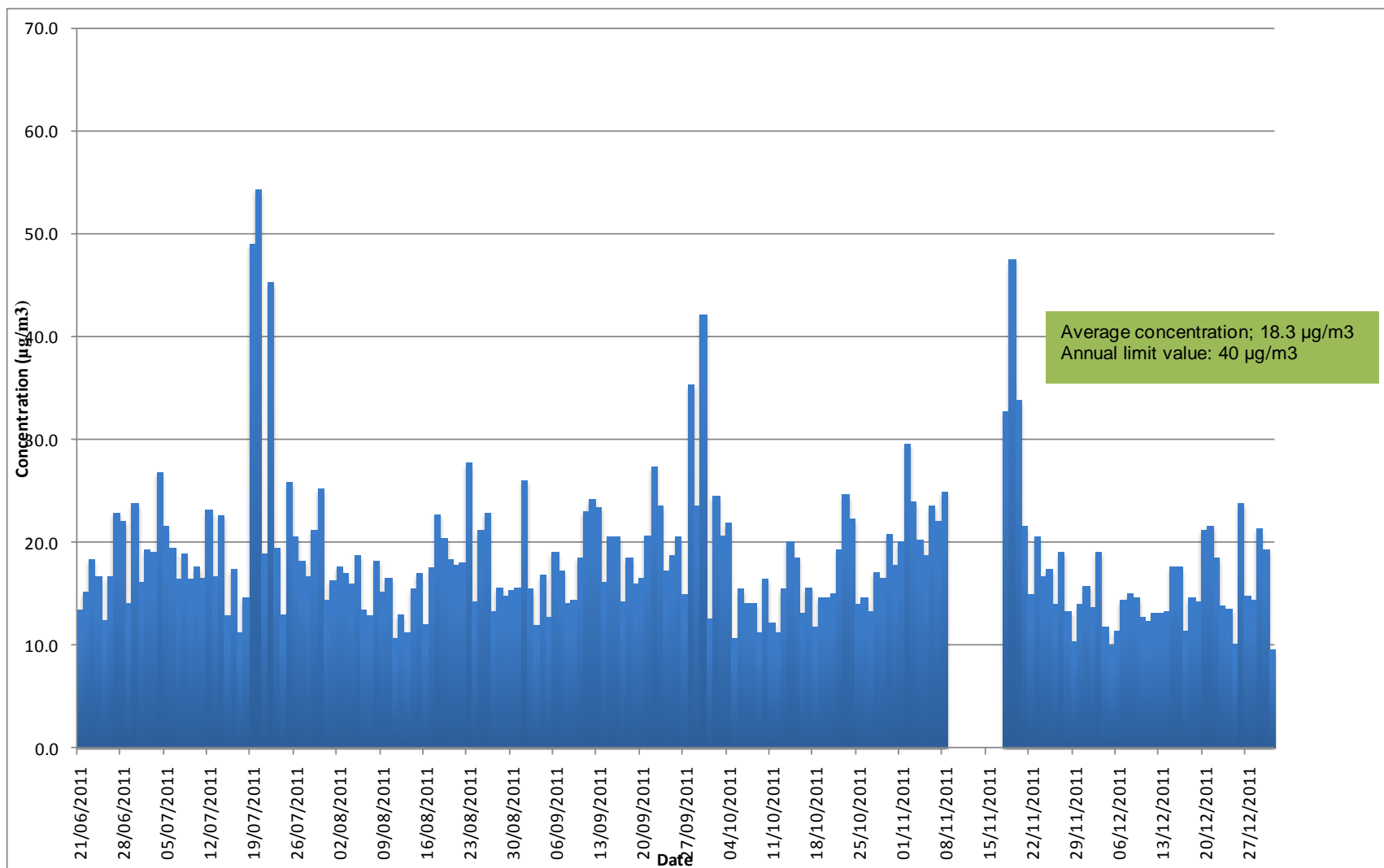


Table 2.1: Comparisons with EPA national network stations for year 2010 (Only Full year 2010 data available in EPA Annual Report)

Location	NO <sub>2</sub>	PM <sub>10</sub>
Winetavern St (City Centre)	35	19
Rathmines	25	18
Ballyfermot	18	13
Phoenix Park	-	11
Ringsend	29	23
<b>Dublin Airport Station</b>	<b>18</b>	<b>19</b>
Swords	16	-
<b>St. Margaret's</b>	<b>7</b>	<b>10</b>
Ennis	-	27
Annual Limit Value	40	40