

AIR QUALITY DATA FOR 2010 (Quarter 4 data for AURN pollutants yet to be ratified)

BRECKON HILL AURN MONITORING STATION

POLLUTANT	Health Standard (Source - Air Quality Regulations 2000)	Results Year 2010	Number of exceedances of the Health Standard	Comments
SULPHUR DIOXIDE	15 minute mean – 266 µg/m ³ not to be exceeded more than 35 times a year (99.9th %ile)	Max 15 min mean – 104 µg/m ³ Date – May 2010 99.9th %ile - 69 µg/m ³ (81 in 2009)	No exceedance	Health Standard met
	1 hour mean - 350 µg/m ³ not to be exceeded more than 24 times a year (99.7th %ile)	Max 1 hour mean - 80 µg/m ³ Date – May 2010 99.7th %ile – 45 µg/m ³ (53 in 2009)	No exceedances	Health Standard met
	24 hour mean – 125 µg/m ³ not to be exceeded more than 3 times a year (99.0th %ile)	Max 24 hour mean - 26 µg/m ³ Date – December 2010 99.0th %ile - 23 µg/m ³ (17 in 2009)	No exceedances	Health Standard met

OVERALL CONCLUSION: - Health standards met for Sulphur Dioxide.

POLLUTANT	Health Standard (Source - Air Quality Regulations 2000)	Results Year 2010	Number of exceedances of the Health Standard	Comments
NITROGEN DIOXIDE	1 hour mean – 200 µg/m ³ not to be exceeded more than 18 times a year (99.8th %ile)	Max 1 hour mean – 118 µg/m ³ Date – December 2010 99.8th %ile - 94µg/m ³ (83 in 2008)	No exceedances	Health Standard met
	Annual mean - 40 µg/m ³ no exceedances permitted	Annual mean - 21.7 µg/m ³ (18.6 in 2009)	No exceedances	Health Standard met

OVERALL CONCLUSION: - Health standards met for Nitrogen Dioxide.

POLLUTANT	Health Standard (Source - Air Quality Regulations 2000)	Results Year 2010	Number of exceedances of the Health Standard	Comments
PARTICULATE PM10	24 hour mean - 50 µg/m ³ (g) not to be exceeded more than 35 times a year (90.0th %ile)	Max 24 hour mean – 47 µg/m ³ (g) Date – Oct 2010 90.0th %ile - 27 µg/m ³ (g) (33 in 2009)	0 exceedances (gravimetric) (2009 - 3, 2008 - 13)	Health Standard met
	Annual mean - 40 µg/m ³ (g) No exceedances permitted	15 µg/m ³ (g) (18 in 2009)	No exceedances	Health Standard met

OVERALL CONCLUSION: - Health standards met for Particulate PM10.

POLLUTANT	Health Standard	Results Year 2010	Number of exceedances of the Health Standard	Comments
PARTICULATE PM2.5 Target only	Annual Mean $25\mu\text{g}/\text{m}^3$ (target to be achieved by 2020)	Annual average $9.5\mu\text{g}/\text{m}^3$ gravimetric (10.5 in 2009)	Not exceeded	Target met

OVERALL CONCLUSION: - Health target met for Particulate PM2.5.

POLLUTANT	Health Standard (Source - Air Quality Regulations 2000)	Results Year 2010	Number of exceedances of the Health Standard	Comments
CARBON MONOXIDE	8 hour running mean - 10 mg/m ³ no exceedances permitted	Max 8 hour RA – 1.5 µg/m ³ Date – July 2010 (2009 – 0.9 mg/m ³)	No exceedances	Health Standard met
BENZENE Based upon ratified data from 1/1/08 to 7/10/08 and provisional data from 7/10/08 to 18/11/08. (To be updated when all data available)	Annual mean – 3.25 µg/m ³ no exceedances permitted	Annual mean – 1.18 µg/m ³ (annual mean 2009 – 1.18 µg/m ³)	No exceedances	Health Standard met
1,3-BUTADIENE 1 Jan 2007 to 19 Sept 2007 (Site closed September 2007)	Annual mean - 1 ppb no exceedances permitted	Annual mean – No data for 08/09/10 (annual mean 2007 - 0.06 ppb)		
OZONE Target only	8 hour running mean - 50 µg/m ³ maximum of 10 exceedances	Max 8 hour RA – 119 µg/m ³ Date – June 2010 (2009 – 104 µg/m ³)	4 exceedances exceedances for 2009 - 1	No exceedance of target

OVERALL CONCLUSION: - Health standards met for Carbon Monoxide, Benzene, 1,3-Butadiene. Health target met for Ozone

Polycyclic Aromatic Hydrocarbons (PAH)	Not included as part of regulations at present Proposed standard 0.25 ng/m ³ B _(a) P annual	Annual average for 2010 -- 0.45 ng/m ³ (Quarter 1,2 and 3 data only. Quarter 4 data yet to be provided) (annual mean in 2009 was 0.39)	Not applicable	Proposed target exceeded
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mean

OVERALL CONCLUSION: - Proposed target exceeded

ELM STREET AIR MONITORING STATION 2009

NITROGEN DIOXIDE

HEALTH STANDARD FOR **NITROGEN DIOXIDE**

1 HOUR MEAN OF $200 \mu\text{g}/\text{m}^3$ NOT TO BE EXCEEDED MORE THAN 18 TIMES A YEAR. AND ANNUAL MEAN $40 \mu\text{g}/\text{m}^3$

NO₂ HIGHEST 1 HOUR AVERAGE $147 \mu\text{g}/\text{m}^3$ DURING JANUARY 2010

ANNUAL MEAN FOR 2010 - $28.1 \mu\text{g}/\text{m}^3$ (Annual mean for 2009 = $25.9 \mu\text{g}/\text{m}^3$, annual mean for 2008 = $27.2 \mu\text{g}/\text{m}^3$)

NO BREACHES OF THE HEALTH STANDARD

PARTICULATE MATTER

HEALTH STANDARD FOR **PARTICULATE MATTER**

24-HOUR MEAN $50 \mu\text{g}/\text{m}^3(\text{G})$ NOT TO BE EXCEEDED MORE THAN 35 TIMES A YEAR. ANNUAL MEAN $40 \mu\text{g}/\text{m}^3(\text{G})$

MAX 24 HOUR AVERAGE $54 \mu\text{g}/\text{m}^3(\text{G})$ DURING JANUARY 2010 (MAX 2009 – 48)

1 EXCEEDENCES ON GRAVIMETRIC SCALE IN 2010 (0 EXCEEDANCES IN 2009)

ANNUAL MEAN $20 \mu\text{g}/\text{m}^3(\text{G})$ (2009 MEAN was $20 \mu\text{g}/\text{m}^3$)

NO BREACHES OF THE HEALTH STANDARD

MACMILLAN COLLEGE AIR MONITORING STATION 2009

NITROGEN DIOXIDE

HEALTH STANDARD FOR **NITROGEN DIOXIDE**

1 HOUR MEAN OF $200 \mu\text{g}/\text{m}^3$ NOT TO BE EXCEEDED MORE THAN 18 TIMES A YEAR. AND ANNUAL MEAN $40 \mu\text{g}/\text{m}^3$

NO₂ HIGHEST 1 HOUR AVERAGE $180 \mu\text{g}/\text{m}^3$ DURING DECEMBER 2010

ANNUAL MEAN FOR 2010 - $29.5 \mu\text{g}/\text{m}^3$ (Annual mean for 2009 = $23.9 \mu\text{g}/\text{m}^3$, annual mean for 2008 = $25.1 \mu\text{g}/\text{m}^3$)

NO BREACHES OF THE HEALTH STANDARD

PARTICULATE MATTER

HEALTH STANDARD FOR **PARTICULATE MATTER**

24-HOUR MEAN $50 \mu\text{g}/\text{m}^3(\text{G})$ NOT TO BE EXCEEDED MORE THAN 35 TIMES A YEAR. ANNUAL MEAN $40 \mu\text{g}/\text{m}^3(\text{G})$

MAX 24 HOUR AVERAGE $46 \mu\text{g}/\text{m}^3(\text{G})$ DURING OCTOBER 2010 (MAX 2009 – $55 \mu\text{g}/\text{m}^3$)

0 EXCEEDENCES ON GRAVIMETRIC SCALE (1 EXCEEDANCES IN 2009)

ANNUAL MEAN FOR 2010 - $18 \mu\text{g}/\text{m}^3(\text{G})$ (Annual for 2009 = $19 \mu\text{g}/\text{m}^3$)

NO BREACHES OF THE HEALTH STANDARD