

Mossmorran: Analysis of benzene data 2014

Non-technical summary

A number of short-term monitoring assessments have been carried out in the vicinity of the Mossmorran complex, and all have shown that atmospheric pollution is well below the standards that have been set to protect human health. The recent long-term study (commissioned by Kennedy Renewables) is particularly significant, because it covers a period of 3-years (January 2011 to November 2013) during which time benzene was measured at three locations – Watson Street Cowdenbeath, Watters Crescent Lochgelly and Little Raith Farm.

The ambient concentrations of benzene at sites in Cowdenbeath, Lochgelly and Little Raith Farm were found to be consistently below the Scottish, UK and EU air quality standards and similar to concentrations that you would expect to find in a typical rural location¹; therefore a full-time monitoring programme in Cowdenbeath and Lochgelly is unnecessary.

	Measured running annual mean (ppb)	Typical rural concentration (HPA)	Scottish air quality objective	UK air quality objective and EU limit value
Cowdenbeath	0.30 to 0.15*			
Lochgelly	0.27 to 0.15*	0.4 ppb	1.0 ppb	1.54 ppb
Little Raith Farm	0.67 to 0.25*			

Table 1: Measured running annual mean concentrations of benzene (parts per billion, ppb) and relevant standards for the protection of human health

* The concentrations of benzene were seen to fall over the duration of the study (see Chart 1)

Members of the public have also asked if the wake from the operation of the turbines could concentrate pollutants and affect neighbouring communities. The Little Raith wind farm became fully operational at the end of November 2012 and there is no evidence to suggest that the wind turbines are having a detrimental impact on air quality in Cowdenbeath or Lochgelly.

1: Health Protection Agency: Compendium of Chemical Hazards, benzene. Version 4. 2011

Chart 1: Measured concentrations of benzene (Running Annual Mean 2012 - 2013)

