



Committed to Air Quality

Years of rigorous testing show that the ExxonMobil Chemical Limited facilities at Mossmorran and Braefoot Bay have little impact on air quality in the local communities.

ExxonMobil commissioned a study of air quality around the Mossmorran complex before, during and after a period of planned maintenance and related flaring activity. The study assessed the quality of the air at eight different locations, including the three local residential areas. The assessment was carried out by the National Physical Laboratory between 21st August and 1st October, 2008.

Monitoring devices in Lochgelly, Auchtertool and Cuttlehill, near Cowdenbeath, found no evidence to show that maintenance or flaring activities on the site were having a detrimental impact on air quality.

Professor Wilson Sibbett, the Wardlaw Professor of Physics at St Andrews University and Chair of the Fife Council Mossmorran & Braefoot Bay Independent Air Quality Monitoring Review Group, explains, "It was important to ensure that the monitoring devices were positioned at locations where pollutants are most likely to be carried by the wind.

"A range of pollutants were monitored, but the two of most concern with regards to human health were benzene and particulate matter, the latter being microscopic material that is carried in the atmosphere."

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The study found that the measured concentrations of benzene in the residential areas when flaring was underway were almost identical to those that were obtained when there was no flaring in progress. There was no evidence to show that flaring increased the concentrations of benzene at the residential areas.

Professor Sibbett explains, "The measured concentrations of benzene at the residential areas were consistently lower than the maximum permitted level that has been introduced to protect human health. This Scottish air quality standard is more stringent than the one that applies in England, Wales and other parts of Europe."

The monitoring study also measured the concentrations of microscopic material carried in the atmosphere.

"If the activities on the Mossmorran site were adding to the local concentrations, this would have been detected by the monitoring device that was located downwind of the plant at the time," says the Professor. "However, the study found that monitors at all locations measured similar concentrations over the same time period, thus suggesting that the material is likely to have been carried in from areas outside Fife.

"This 'background' level will consist of a wide range of materials that have been created by human and natural activities - for example, dust from agricultural activities, sea salt, smoke from domestic fires, fungal spores and sand from the Sahara."

The study found that all the concentrations of particulate matter were typical of a rural environment and they all fell into the lowest categories of the air-pollution bandings and index.

The study concludes, "There is no evidence to indicate that the activities on the Mossmorran site were making a measureable contribution to the levels of particulate matter in the residential areas."

For more information, contact the Fife Ethylene Plant Community Affairs department on 01383 737000.



Prof. Wilson Sibbett

