

Dear Mr Appleton,

**Re: Edgeley Green Power's application for a 32 MW biofuel power station at Shoreham Port, AWDM/0868/1**

I am writing on behalf of Biofuelwatch to object to Edgeley Green Power's (EGP) application for a 32 MW biofuel power station at Shoreham Port. We will be submitting further arguments, especially relating to sustainability by 11<sup>th</sup> August. Here, I would like to outline the air quality related grounds for our objection.

According to the Air Quality Assessment provided by EGP, NO<sub>2</sub> emissions are expected to be 18.67 g/s and PM emissions 6.22 g/s. Presuming that the power station will operate on average 8000 hours a year (as predicted in the planning documents), this would mean that the power station would emit 538 tonnes of NO<sub>x</sub> and 179 tonnes of PM a year – the URS air quality model provided for EGP states that all NO<sub>x</sub> will be assumed to be converted to NO<sub>2</sub> in respect of the long-term NO<sub>2</sub> average.

I attach the Planning Inspector's recommendation and the Secretary of State's decision notice about a planning appeal by a different company, Blue NG, who were seeking to build an 18.5 MW biofuel power station in Southall, Ealing, West London. The Secretary of State endorsed the Planning Inspector's recommendation and upheld the local authority's decision to reject that application, following an Appeal and Public Inquiry. That decision was made on grounds of NO<sub>2</sub> impacts, with nearby affected areas having been declared an Air Quality Management Area and with air quality standards being significantly exceeded at various receptors nearby. Furthermore, relevant health statistics which were worse than the English average were cited. The Secretary of State observed: "*The proposal would produce about 126 tonnes of NO<sub>x</sub> and 46 tonnes of PM<sub>10</sub> a year, and it is not a run of the mill scheme.*"

It appears to us that there are significant similarities between the context of Blue NG's application in Ealing and that of EGP's application in Shoreham:

Close to Shoreham Port, three AQMAs have been declared (two by Adur Council, one by Brighton and Hove District Council) and air quality standards are being regularly exceeded at various sites nearby. From a report published by Adur Council, Adur as a whole has an above-average death rate from circulatory disease in men and an above-average death rate from hypertensive disease and strokes in women. (<http://www.adur.gov.uk/docs/facts-figures/community-profile-adc-wbc.pdf>) High levels of air pollution, including NO<sub>2</sub> and small particulates are known to increase the risk and severity of such illnesses. However, the amount of NO<sub>x</sub>/NO<sub>2</sub> and PM which would be generated by the proposed Shoreham power station will be significantly greater than the amount project from the rejected one in Ealing.

We would further like to list a number of serious concerns about the Air Quality Assessment by URS submitted by EGP:

1. When predicting **process emissions**, the AQ Assessment states: "*Data input was provided by MAN Diesel & Turbo UK Ltd.*". There is nothing to suggest that actual air quality data from the different feedstocks being considered by EGP have been used, including tall oil which we understand has quite different properties than vegetable oil. We understand that there have been serious concerns over air quality impacts of a much smaller existing biofuel plant operated by Rocpower at Commonsides Land, Featherstone in Wakefield Council and that, following extensive complaints from adjacent businesses on an industrial estate, that power plant has had to close down for much of the time. We understand that the Rocpower biofuel plant burns primarily tall oil and that there have been big problems with attempted mitigation (perhaps because of the corrosiveness of tall oil?).

2. URS has carried out an air dispersion model. We have in the past looked at planning applications submitted for a significant number of biofuel and biomass power station application. It appears to be common practice to provide maps illustrating such a dispersion model, i.e. maps which show where concentrations are highest, with a given stack height, and where they begin to reduce. The AQ Assessment submitted by EGP does not include such a map and it gives no data which would allow readers to judge whether they agree with the particular **choice of receptors** or whether NO<sub>2</sub> contributions from the proposed power station might actually be higher at other receptors that have not been considered.
3. **Background or baseline figure for NO<sub>2</sub>**: The AQ Assessment concludes that even with additional emissions from the proposed power station, legal air quality standards in the area will not be exceeded. This is based on URS having chosen a low 'baseline' or background NO<sub>2</sub> figure. They state: "*The highest possible background concentrations have been selected for each pollutant from the available sources of background data, unless it is clear that concentrations are not representative of background concentrations, due to the presence of atypical emission sources, such as road traffic.*" The figure they have chosen is the 2010 annual NO<sub>2</sub> figure measured at St Aubyn's Crescent/Fishergate, i.e. 23.8 µg/m<sup>3</sup>. Yet at various nearby sites in Adur and Portslade, much higher annual average NO<sub>2</sub> levels are being measured. At Albion Street, Southwick, annual NO<sub>2</sub> levels have, for at least 2.5 years, been very close to the 40 µg/m<sup>3</sup> legal limit. At the High Street AQMS in Shoreham, they exceeded that level both in 2010 and in the first half of 2012, according to air quality figures obtained from Adur Council. During 2011, they were only just below the 40 µg/m<sup>3</sup> limit. Higher levels than at St Aubyn's Crescent have also been recorded at Old Shoreham Road, Underdown Road and Holmbush Roundabout. At Portslade, significant recent exceedances have been measured at Trafalgar Road consistently over 50 µg/m<sup>3</sup> for the past three years, Wellington Road (very close to the proposed site), where levels were 52µg/m<sup>3</sup> for 2009, 57.8 µg/m<sup>3</sup> for 2010, and 47.5 µg/m<sup>3</sup> for 2011 and at the West Hove Infant School, where the 40 µg/m<sup>3</sup> was exceeded in 2009 and 2010. According to Brighton and Hove, the NO<sub>2</sub> trend at several AQMA sites has been rising since 2007.  
See: [http://present.brighton-hove.gov.uk/Published/C00000707/M00004045/AI00028428/\\$20120703102903\\_002364\\_0008499\\_2012AQProgressReportBrief.docA.ps.pdf](http://present.brighton-hove.gov.uk/Published/C00000707/M00004045/AI00028428/$20120703102903_002364_0008499_2012AQProgressReportBrief.docA.ps.pdf). URS do not say in the AQ Assessment why they have rejected those figures for the background NO<sub>2</sub> baseline. Classing them all as 'not representative' appears very questionable to us.
4. URS state that all pollutants other than NO<sub>2</sub>, PM and Cadmium have been screened out as insignificant and they provide a table with figures backing this up. However, while nearby protected nature sites have been identified, we can see no indication that nitrate, nitrogen or acid deposition at those sites has been considered at all.

Best regards,

Almuth Ernsting