SCHEDULE 3

Content and other characteristics of gas

Part III

Interpretation

1. In this Schedule—

"bar" means bars (absolute);

"barg" means bars (gauge);

"°C" means degrees Celsius;

"C_3H_8" means the percentage by volume of propane in the equivalent mixture;

"equivalent mixture" means a mixture of methane, propane and nitrogen having the same characteristics as the gas being conveyed and calculated as follows—

(i) the hydrocarbons in the gas being conveyed, other than methane and propane, are expressed as an equivalent amount of methane and propane which has the same ideal volume and the same average number of carbon atoms per molecule as the said hydrocarbons; and

(ii) the equivalents derived from head (i), together with an equivalent for all of the inert gases in the gas being conveyed, expressed as nitrogen, are normalised to 100%, such that the equivalent mixture of methane, propane and nitrogen has a Wobbe Number equal to that of the gas being conveyed;

"ICF" means the Incomplete Combustion Factor;

"mg/m^3" means milligrams per cubic metre at 15°C and 1.01325 bar;

"MJ/m^3" means megajoules per cubic metre where the calorific value of a dry gas is determined on the basis that the water produced by combustion is assumed to be condensed;

"N_2" means the percentage by volume of nitrogen in the equivalent mixture;

"PN" means the sum of the percentages by volume of propane and nitrogen in the equivalent mixture;

"relative density" means the ratio of the mass of a volume of the gas when containing no water vapour to the mass (expressed in the same units) of the same volume of air containing no water vapour under the same conditions of temperature and pressure;

"SI" means the Soot Index;

"WN" means the Wobbe Number;

trigonometric functions are to be evaluated in radians.

2. In this Schedule, ICF, SI and WN shall be calculated in accordance with the following formulae—

$$ICF = \frac{WN - 50.73 + 0.03PN}{1.56}$$

$$SI = 0.896 \tan^{-1}(0.0255C_3H_8 - 0.0233N_2 + 0.617)$$

$$WN = \frac{calorific\ value}{\sqrt{relative\ density}}$$