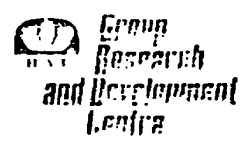


RD. 944-R



TO DR. S.J. GREEN,
RESEARCH & DEVELOPMENT,
MILLBANK.

FROM DR. K.D. KILBURN.

REF KDK/JP/46C.

DATE 31st October, 1972.

AKB

REPORT No. RD.944-R

I enclose a report by Richard Baker on the distribution of gases within burning cigarettes containing various smoking materials.

The main interest was in the formation of carbon monoxide, and in its transmission to the butt. Pyrolysis is believed to be a more important process for producing carbon monoxide than the combustion of carbonaceous residues, at least as far as mainstream smoke is concerned.

Since Camver-type smoking conditions were used in this work, the relevance of the results to puffing conditions must be established. We hope to do this with a fast gas analyser in the early part of next year.

The other important factor controlling the carbon monoxide concentration at the butt is its diffusion through the cigarette paper. Some existing cigarette papers may be better at "losing" carbon monoxide than others. Consequently, we are surveying a range of papers for their diffusion and permeability characteristics.

Sir Charles Ellis would probably be interested in this report.

Keith

S J G - 2cc min

one A C AE - sent 6/11/72

~~*Baker S.J.C.*~~

110081105