(15)

JAN - JUNE 88 ; 3.

SIDESTREAM
REDUCED SIDESTREAM
TOBACCO TYPE
FILTERS. X CA ETC.

RECORD TYPE	:	P
SUB TYPE	:	S
SECURITY CODE	:	
FUNDING BODY	:	
ORGANIZATION	:	ITL CANADA
GROUP NUMBER	:	501
LOCAL PROJECT NUMBER(S)	:	T-7099;02
PROJECT TITLE	:	Evaluation of Reduced Sidestream and Self-Extinguishing Cigarettes.
PERSON RESPONSIBLE	:	PORTER,A.; MCBRIDE C.
EFFORT	:	0.78 * 1987
PROJECT DESCRIPTION	:	The aim of this project is to provide the company with viable methods of reducing sidestream from cigarettes, and designing cigarettes with self-extinguishing properties. To achieve this, new papers from suppliers will be evaluated as they become available and cigarettes designed with lower filler weights will be made. Methods of alleviating some of the problems with the deliveries and subjective characteristics of the mainstream smoke which occur with these designs will be investigated. We will also survey sidestream deliveries from brands on the Canadian market on an annual basis.
SCOPE	:	GROUP
DEPTH	:	APPLIED
FUNCTION	:	MARKETING
OBJECTIVE	:	LEVELS; SOCIAL
CLUSTER	:	SIDESTREAM/AMBIENT
DATE REVIEW WRITTEN	:	June 1988
REVIEW TITLE	:	Evaluation of Reduced Sidestream and Self-Extinguishing Cigarettes.
REVIEW TEXT	:	Since the last review, mutagenicity assessment, using the Ames test, and optical density measurements, courtesy of BAT (UK & E) R & D, have been made on the low sidestream products described previously. These products were 84 mm conventional circumference cigarettes, delivering 4 (S1) and 9 (S3) mg of tar under standard conditions. The blend contained in these products included 15% DIET. Cigarettes were made to a density of 23.9 cg/cc using an Ecusta low sidestream paper (35% MgO). Sidestream reductions of tar and nicotine were of the order of 50-55%.

Ames assays of both sidestream and mainstream smoke from the reduced sidestream cigarette (S3), a control cigarette with the same blend (Medallion) and the Check 28 cigarette indicated that, in general, sidestream smoke was less mutagenic than mainstream smoke. Mainstream smoke from the reduced sidestream product was significantly less active than the mainstream smoke from the control cigarette ($p=0.01$) but was significantly more active than mainstream smoke from the Check 28 cigarette ($p=0.01$). However, the sidestream smoke from the reduced sidestream product was not only significantly less active than the sidestream smoke from the control cigarette ($p=0.01$), it was, in statistical terms, no different in Ames activity to the sidestream smoke from the Check 28 cigarette.

Optical density measurements by BAT (UK & E) R & D on products S1 and S3, showed that a reduction in sidestream optical density of 70% had been achieved. These results indicated that S1 and S3 fall into the category of consumer perception corresponding to "Obvious Reduction in Sidestream Smoke Without Comparison to a Conventional Product", as documented in earlier BAT (UK & E) work.

The latest reduced sidestream products, NS2 and NS4, are 84 mm conventional circumference products delivering approximately 8 and 14 mg of tar respectively. The blend is a high quality, upper stalk recipe containing 30% DIET/70% lamina/0% stem. Samples were made at a density of 19.6 cg/cc using the same Ecusta low sidestream paper. Firmness and puff number were acceptable. Sidestream reductions, as measured by the BAT Fishtail method, were of the order of 65-75% compared to a conventional product. In-house subjective evaluation described products as weak for their tar levels, with a considerable lack of irritation, body and strength especially on the initial puffs. No off-tastes were detected. Ash appearance was acceptable.